Restarting and Sustaining Growth and Development in Africa: The Macroeconomic Management Dimension

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Abstract

The task of restarting and sustaining growth and development in Africa requires a major, sustained improvement in macroeconomic management. This paper (the third in a series) takes a comprehensive approach to macroeconomic management. It embraces monetary and fiscal policies, exchange rate policies, and debt management. Taking this perspective means considering all of the major inter-connections that arise in the formulation and implementation of macroeconomic policy. This imposes consistency and forces policy makers to take note of the spillover effects of their actions in all of these areas.

At its most fundamental level, successful macroeconomic management depends on government self-restraint. No entity besides the government can reduce the budget deficit, allocate public expenditure efficiently, ensure that the growth of the money supply is consistent with price stability, and ensure that external debt remains at levels that can be serviced.

Structural adjustment programs provide the opportunity for a country to make the transition from macroeconomic imbalance and its attendant disruption and instability to a situation of macroeconomic balance and stability. The challenge, however, is to institutionalize the processes through which stability can be maintained. Several mechanisms to achieve and their implications are examined.

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1. Introduction

One of the principal challenges of restarting and sustaining growth and development in Africa is to ensure that the basic macroeconomic relationships are consistent with economic stability. There is now a rich literature demonstrating that *sustained* growth and development does not occur under conditions of instability (Dervis and Petri 1987; Fischer 1993; Ghura and Grennes 1993; Bouton, Jones and Kiguel 1994; Goldsbrough *et al.* 1996; Schmidt-Hebbel 1996; Lensink 1996; Calamitsis, Basu and Ghura 1999). While macroeconomic instability has a variety of internal and external causes, its primary source throughout Africa has been persistent public sector deficits financed by money creation. The outcome has been high and rising inflation, unserviceable levels of external debt, stagnant or declining real income, capital flight, currency substitution, and unstable exchange rates.

These problems became increasingly evident following the shocks (oil and food) in the early 1970s. After more than a decade of hesitant adjustment and poor economic performance, a growing number of African governments began taking more systematic steps to stabilize their economies. Governments were responding to internal pressures as economic conditions worsened. They were also reacting to the increasing availability of donor support for macroeconomic stabilization programs. The basic objective has been for African economies to reduce their external and internal imbalances and move to a sustainable growth path.

The overall economic circumstances of sub-Saharan Africa (SSA) during the past 20 years have not been positive (Goldsmith, 2001). However, there were some positive growth indicators during the middle 1990s. The fundamental question that we ask is whether the positive trends of a few years can be sustained in the face of the backwash effects of the Asian financial turmoil, the flare-up in Congo, resurgent war in Angola, war in the horn of Africa, policy reversals in South Africa, the general decline in primary commodity prices, and the deleterious impact and growth of the spread of HIV/AIDS.

Although the future course of economic growth in Africa is difficult to predict, what is certain is that economic growth cannot and will not be maintained without a continued commitment to prudent macroeconomic management. African economic history, as well as economic history elsewhere, demonstrates that this is not an issue that governments can fudge.

This paper provides first a review of the basic elements of macroeconomic management in section 2. Following, section 3 discusses fiscal and monetary policies. Next, section 4 reviews the problems associated with exchange rate management. Section 5 considers debt management issues. Section 6 integrates the different elements of macroeconomic management by offering suggestions for enhancing macroeconomic management. Section 7 has concluding comments. An annex to the chapter discusses exchange rate issues in the Franc zone (FZ).

2. Macroeconomic Management

a. Stabilization

Stabilization policies seek to eliminate macroeconomic imbalances. The object is to achieve reasonable price stability and to maintain an exchange rate regime that balances foreign exchange receipts and payments. This should be done without generating arrears or requiring exceptional financing from donors and without exchange controls, import licensing or other extraordinary barriers to trade. At the same time, stabilization programs include measures to improve the operation of the financial system by reducing the use of credit controls and directed credit. They also require stimulating the use of indirect control of the supply of money and credit (Duesenberry and McPherson 1991, 1992; Alexander, Balino and Enoch 1996).

Price stability can be restored only by bringing domestic absorption into balance with domestic output, reliable flows of foreign aid, and foreign direct investment. This requires some combination of demand restraint to reduce domestic absorption and supply side policies to increase potential output. Supply side measures include the increased reliance on market forces in all sectors of the economy, privatization of state-owned enterprises (SOEs), and the removal of price controls, rationing and subsidies. Most African countries have made progress on this front in agricultural marketing and pricing, and trade policy (Hill 1994; *Economist* 1994; Sachs 1996; Ndulo and van de Walle 1996; Stryker 1997; Fischer, Hernández Catá, and Khan 1998; Gibb 1998). The privatization of SOEs has been aimed at reducing unproductive budget expenditures and increasing the overall efficiency of the economy. Also included has been a greater emphasis on investment in infrastructure to support both agriculture and industry (World Bank 1994). Finally, the removal of exchange controls helps overcome the shortage of materials and spare parts and improves capacity utilization.

Capacity utilization improves once resources to buy imports become available. But resources released from domestic absorption must be transferred into the production of exports or import substitutes. That takes time. To help ease the adjustment process, donors have typically provided enough net aid to cover the initial resource gap. Even with this support it is necessary to increase exports in order to pay for the additional imports required for continued growth. Depreciation of the real exchange rate will be needed to make exports more competitive and to provide incentives for their production.

b. Links Between Internal and External Balance

Policy makers need to recognize the degree to which their various macroeconomic instruments are interconnected. The exchange rate required for external balance depends on the level of output. At the same time the internal balance condition makes the level of output depend on the exchange rate, budget expenditures, taxes, and the interest rate. The interest rate required for internal balance is influenced by changes in budget expenditures and taxes. And, the increasing integration of the world economy imposes constraints on the level of interest rates consistent with acceptable capital flows. Policies related to domestic interest rates may induce capital flows. These, in turn, influence exchange rates.

Policy makers must also be prepared for continuing changes in circumstances. Changes affecting one economic objective will affect others as well. The art of policymaking is not so much the task of finding the best of all possible policies for a given set of conditions as it is adapting effectively to new conditions.

c. Objectives of Demand Management

At its most basic level, macroeconomic policy is always concerned with the balance between aggregate demand and productive capacity. Long term policies are intended to speed up the growth of productive capacity by encouraging saving and the efficient utilization of available capital. Short-term policies are designed to manage demand in ways that fully utilize *existing* resources while limiting inflationary pressures.

The need to contain inflationary pressures is now a central principle of macroeconomic management. Inflation has adverse consequences for the distribution of income and wealth. It is one of the cruelest (implicit) taxes on the poor since they have few means of defending themselves against the loss of the real value of their financial assets. Inflation also imposes high adjustment costs, especially in economies with long histories of rapid price increases.

Inflation rates across Africa can be explained by four principal sets of factors. The first has been the rapid increase in nominal demand resulting largely from monetary expansion influenced by government expenditures and rising export earnings. The second is inherited inflation resulting from slowly adjusting expectations and the efforts of groups such as civil servants and unionized workers in the formal sector to "catch up" with cost-of-living changes. A third set of factors has been crop failure, price and supply shocks through changes in world prices of imports, and administrative changes such as the removal of subsidies. A fourth influence has been the depreciation of the nominal exchange rate. Sometimes this is the result of earlier inflation. However, it may have initially resulted from deterioration in the terms-of-trade.

The observed pattern of inflation results from the interplay between price and supply shocks and changes in nominal demand. The structure of the economy has an influence as well. The competitive structure of markets and the political strength of civil servants and unionized workers will determine how prices respond to cost increases associated with supply shocks, changes in exchange rates, and the ensuing changes in fiscal and monetary policy. An early response to shocks is required because inflation caused by excess demand, for example, will continue as long as price increases are matched by increases in nominal demand. Moreover, if the inflation is allowed to continue for any length of time, expectations of continued inflation will become established. This adds to the difficulties of achieving stability.

Inadequate policy responses to shocks have generally exacerbated inflation throughout Africa (Easterly and Schmidt-Hebbel 1993; Berthélemy 1995; Asea and Reinhart 1997; Collier and Gunning 1999). Unwillingness to reduce demand and to adjust exchange rates in response to adverse terms of trade have been costly in terms of inflation and the build-up of external debt, particularly during the 1970's and early 1980's. The counterpart to this general unwillingness to adjust has been the readiness of governments to allow their central banks to finance their

expenditure programs. Since the expansion of central bank credit does nothing fundamental to raise the supply of real resources, the outcome has been highly inflationary.²

While inflation has adverse effects, it does not follow that the avoidance of inflation should be the sole objective of macroeconomic policy. Some compromise between the objectives of price stability and growth of output is always necessary. All market economies, whether developed or developing, have found that in spite of the importance attached to the idea of full employment, it is never possible to fully utilize all productive resources. Some slack is needed in the system to help foster adjustment. Macroeconomic managers have found that in practice it is nearly impossible to eliminate inflation completely. Continuous adjustment is required because all stabilization programs experience shocks. Supply shocks may emanate from internal or external sources. Demand shocks typically occur as a result of changing export prices, domestic investment booms or slumps, or a rapid change (up or down) in the flow of foreign aid.

Cross-country experience shows that the link between demand and inflation cannot simply be reversed. Markets often respond asymmetrically (Stiglitz 1984; Ledyard 1998). While excess demand causes prices to rise without raising output, deficient demand may cause output to fall for some time with little effect on prices. In some cases, limits on nominal expenditure growth have halted inflation with no more than a brief slowdown in output growth. Equally, there have been cases in which output had to stagnate for a long time in order to bring down inflation. The difference in response of prices to changes in demand is widely attributed to the difference in the credibility of governments and their policies.

If their programs are not convincing in the sense that they induce an appropriate behavioral response, policy makers will find that they cannot restore price stability without imposing painful reductions in output and employment. Failure to formulate and implement credible policies often leads to situations where they or their successors will face higher inflation and more severe balance of payments problems.

Credibility problems are intensified by delayed policy responses. Tardy, hesitant, and partial responses by policy makers to worsening inflation demonstrate to asset holders that policy makers do not appreciate the issues, or they are not prepared to act decisively to deal with them. Accordingly, asset holders begin to take steps to defend themselves against the loss of wealth induced by inflation. This leads to capital flight, currency substitution, and the accelerated purchase of real assets.³

To summarize the lessons of experience:

- Efforts to take advantage of the apparent slack in an economy have to be pursued with caution to avoid accelerating inflation;
- Inflation can be started by supply shocks or by demand shocks;
- It is often difficult to achieve rapid disinflation. Moreover, the longer inflation persists the more difficult and costly the process of disinflation.
- To prevent inflation, it is important to avoid monetary policies that accommodate inflationary pressures as a means of maintaining the level of output.

d. The Macroeconomic Situation in Sub-Saharan Africa

The broad trends in key macroeconomic variables for the last two decades have been traced in Tables 1 and 2. (Data from World Bank Africa 2000 Database; Table 2 reports data for SSA excluding Nigeria and South Africa.) The first four rows give income measured in billions of dollars, the aggregate real growth rate, the level and the growth of real GDP per capita. These data show that income growth has been slow, and there has been no substantive improvement in real per capita income. When data for Nigeria and South Africa are excluded, this point is even sharper. Some improvements have been evident over recent years. However, they have been modest and inadequate to compensate for earlier declines. As noted above, recent events in the broader world economy have substantially reduced prospects that these improvements will continue, especially over the short term.

The GDP data highlight the degree to which Africa has been marginalized in the world economy. In 1980, the GDP in SSA was 2.5 percent of the world total (of \$10.9 trillion). By 1998, it had fallen to 1.1 percent of world income (of \$28.9 trillion). Over the same period, SSA's population had risen from 8.6 percent of the world total to 10.7 percent of the world total (data from *World Development Indicators* 2000, World Bank, Tables 3 and 12). A declining income share and rising population share emphasize the severity of the growth and development problems facing Africa (Collier 1995; World Bank 2000a).

The next two rows of the tables report gross domestic investment and gross domestic savings. These have been low by historical standards in Africa and by standards of other major regions. Starting from the early 1990s (late 1980s - when Nigeria and South Africa are excluded), there have been a persistent gap between savings and investment. This resource gap, reflected in the difference between exports and imports, has been the source of the rapid build-up of external debt and the increasing dependence of African countries on foreign assistance.

Table 1. Sub-Saharan Africa: Selected Macroeconomic Indicators, 1980-98

Macroeconomic Indicators	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
GDP at market prices (bill. 1995 USD)	251.6	263.2	261.5	256.7	266.4	264.8	269.6	275.8	287.4	295.7	298.5	300.0	296.1	298.5	305.3	317.7	332.7	344.0	350.7
GDP growth (annual %)	5.7	4.6	-0.7	-1.8	3.8	-0.6	1.8	2.3	4.2	2.9	0.9	0.5	-1.3	0.8	2.3	4.1	4.7	3.4	1.9
GDP per capita (1995 USD)	660.9	671.7	648.0	617.3	623.0	601.6	595.4	591.8	599.2	599.0	587.2	573.5	550.2	542.6	541.5	548.5	558.8	561.9	558.2
GDP per capita growth (annual %)	2.5	1.6	-3.5	-4.7	0.9	-3.4	-1.0	-0.6	1.2	0.0	-2.0	-2.3	4.1	-1.4	-0.2	1.3	1.9	0.5	-0.6
Gross Domestic Investment (% of GDP)	20.2	22.8	19.8	16.2	15.5	13.8	14.6	14.6	16.5	15.8	14.2	17.0	14.7	16.2	17.5	18.5	17.7	17.4	17.8
Gross Domestic Savings (% of GDP)	28.5	23.2	21.1	20.5	21.0	21.2	20.9	20.5	19.2	19.4	17.9	18.2	13.0	14.5	16.5	16.2	17.7	16.4	14.8
Industry, value added (% of GDP)	35.26	32.4	30.4	30.6	29.4	28.5	27.1	28.0	28.4	29.9	30.4	30.1	31.9	30.2	30.0	29.5	29.5	28.8	27.4
Agriculture, value added (% of GDP)	17.9	19.5	20.2	18.6	19.3	22.1	21.9	20.6	21.7	20.2	19.1	19.1	17.6	17.8	16.7	16.6	17.6	17.9	18.3
Manufacturing, value added (% of GDP)	12.0	13.1	12.9	13.4	13.1	12.1	12.7	13.2	14.0	14.0	14.5	14.5	14.4	14.2	13.8	14.0	12.9	12.7	11.9
Services, value added (% of GDP)	37.2	39.0	39.6	40.8	41.0	39.4	40.8	41.2	41.6	41.2	43.3	44.4	46.1	46.8	47.0	48.0	46.7	46.8	47.7
Food Production Index (1989-91=100)	77.7	80.8	81.3	79.8	79.5	85.3	89.8	88.6	94.7	97.6	98.6	103.8	103.8	108.1	111.8	112.9	117.9	117.9	:
Food Production p.c. (1989-91=100)	105.3	108.5	107.1	101.6	98.3	100.2	103.4	100.2	100.9	101.1	99.5	99.1	96.0	96.3	94.6	96.8	95.2	93.6	:
Export of Goods & Services (% of GDP)	30.6	25.5	23.3	22.4	24.0	25.0	24.0	24.1	24.0	25.0	26.5	24.7	25.8	25.1	27.6	28.8	30.9	29.8	27.2
Import of Goods & Services (% of GDP)	27.7	30.7	27.8	23.8	24.1	23.2	23.4	23.7	24.3	24.5	24.5	24.4	26.9	26.6	28.7	30.5	30.4	30.8	30.6
Inflation (CPI, annual %)	9.4	11.2	17.0	16.1	11.2	6.5	10.2	8.2	10.4	9.0	13.1	13.8	18.8	9.2	13.4	9.8	9.4	10.1	9.5
M2 as a share of GDP (%)	34.3	35.6	36.3	36.4	36.7	36.6	35.1	34.1	34.6	32.3	32.6	33.8	30.9	29.9	31.1	29.2	29.0	29.8	30.8
External Debt, total (bill. USD)	84.1	93.1	96.8	108.8	109.9	123.6	139.7	148.0	150.5	157.4	177.4	183.9	183.1	195.3	216.5	230.6	227.1	219.3	181.7
Net ODA, all donors (bill. USD)	7.4	7.3	7.5	7.3	7.6	8.5	10.5	12.1	13.7	14.5	17.3	17.0	18.3	16.8	18.2	17.9	15.7	14.2	14.2
Net ODA, all donors (% of GDP)	2.5	2.5	2.8	2.9	3.3	4.1	4.6	4.8	5.2	5.4	5.8	5.6	5.8	5.5	6.3	5.6	4.7	4.1	4.3
Net Foreign Direct Investment (bill. USD)	-0.7	0.2	1.7	1.1	1.3	0.8	1.5	1.6	1.5	3.6	0.8	1.7	-0.4	1.0	1.1	1.4	3.6	5.5	3.6
Population growth (annual %)	3.1	2.9	3.0	3.1	2.8	2.9	2.9	2.9	2.9	2.9	3.0	2.9	2.9	2.2	2.5	2.7	2.8	2.8	2.6

Source: World Bank Africa 2000 CD-ROM Database

Table 2. Sub-Saharan Africa excluding South Africa and Nigeria: Selected Macroeconomic Indicators, 1980-98

Macroeconomic Indicators	1980	1981	1982	1983	1984 1	1985	1986	1987	1988 1	1989 1	1990 1	1991 1	1992	1993	1994	1995	1996	1997	1998
GDP at market prices (bill. 1995 USD)	100.8	105.1	107.5	108.8	110.3	112.9	117.1	119.7	124.0 1	127.4	128.7	130.6	129.0	129.0	131.2	138.3	145.9	152.2	157.5
GDP growth (annual %)	9.0	4.3	2.3	1.2	1.4	2.3	3.7	2.2	3.6	2.7	1.1	4.1	-1.2	0.0	1.7	5.5	5.5	4.3	3.5
GDP per capita (1995 USD)	357.4	362.0	359.8	353.4	348.7	346.9	349.4	347.0	349.2	348.3	341.5	336.4	322.7	316.3	314.1	322.6	330.9	335.5	338.3
GDP per capita growth (annual %)	-2.4	1.3	-0.6	-1.8	-1.3	-0.5	0.7	-0.7	0.6	-0.3	-1.9	-1.5	4.1	-2.0	-0.7	2.7	2.6	4.1	8.0
Gross Domestic Investment (% of GDP)	18.1	18.8	17.7	15.3	14.2	14.7	15.2	15.4	16.7	15.3	16.0	20.1	15.7	17.3	19.3	19.3	20.2	9.61	19.3
Gross Domestic Savings (% of GDP)	20.4	18.6	19.4	19.2	20.7	8.02	20.6	19.2	16.5	15.9	15.0	16.6	7.0	10.1	14.3	12.6	13.3	14.4	13.3
Industry, value added (% of GDP)	22.9	22.3	22.2	22.5	22.9	22.6	20.7	21.2	22.6	23.6	24.4	23.8	24.4	23.5	24.0	23.5	24.2	23.5	22.8
Agriculture, value added (% of GDP)	26.4	26.2	26.1	25.8	25.2	27.3	28.1	27.3	29.0	28.3	27.4	28.9	29.4	30.6	28.4	28.0	27.6	27.6	27.2
Manufacturing, value added (% of GDP)	8.8	8.8	9.8	8.2	9.1	0.6	2.6	10.0	10.9	10.9	11.2	11.2	11.5	10.9	7.6	6.6	9.5	9.5	9.5
Food Production Index (1989-91=100)	81.3	84.6	86.0	84.8	82.9	88.8	93.9	91.4	97.1	98.5	98.9	102.6	101.8	104.2	107.5	9.601	114.2	114.4	:
Food Production p.c. (1989-91=100)	105.3	108.5	108.0	102.3	99.1	100.2	103.8	9.001	101.2	101.1	6 2.66	99.1	0.96	96.3	94.6	8.96	95.2	93.6	:
Export of Goods & Services (% of GDP)	27.7	24.7	24.3	24.1	25.8	24.2	21.8	21.1	21.8	22.9	24.9	24.2	297	25.1	31.1	32.1	32.8	31.8	29.5
Import of Goods & Services (% of GDP)	33.7	33.5	31.3	28.6	27.7	26.5	24.8	25.8	25.9	26.7	28.1	28.7	32.7	31.4	36.4	37.5	37.9	36.9	35.6
Inflation (CPI, annual %)	10.4	16.4	11.1	15.8	3.6	8.1	10.6	9.2	9.2	11.0	11.4	10.8	16.7	11.4	10.6	10.5	10.6	16.1	11.3
M2 as a share of GDP (%)	20.4	22.3	22.2	21.5	21.4	22.8	21.9	23.5	22.0	22.0	22.0	22.4	21.6	22.6	23.1	21.6	22.9	21.7	21.2
External Debt, total (bill. USD)	51.9	58.0	64.9	69.4	73.4	288.7	8.86	0.611	120.9	127.3	144.0 1	150.4	154.2	164.7	164.9	174.3	172.1	165.8	175.1
Net ODA, all donors (bill. USD)	7.4	7.3	7.5	7.2	7.5	8.5	10.4	12.0	13.6	14.2	17.0	16.7	18.0	16.3	17.7	17.3	15.1	13.5	13.5
Net ODA, all donors (% of GDP)	6.5	6.3	6.7	6.9	8.9	7.3	7.7	8.4	9.1	9.5	11.0	10.8	12.5	11.4	14.3	12.5	10.0	9.8	8.5
Net Foreign Direct Investment (bill. USD)	0.8	9.0	6.0	8.0	6.0	6.0	1.1	1.2	1.1	1.1	0.2	1.1	6.0	0.7	1.3	2.0	3.1	2.9	3.5
Population growth (annual %)	3.1	2.9	2.9	3.1	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.0	2.9	2.0	2.4	2.7	2.8	2.9	5.6

Source: World Bank Africa 2000 CD-ROM Database

The data on the shares of value-added in agriculture, manufacturing, and services show that there has been little change in the overall economic structure over the period. In aggregate terms, the food production index has risen modestly over the whole period. In per capita terms, however, it has not increased. The relative dependence of SSA on exports and imports has changed little over the entire period.

Inflation, as noted above, has been persistent and relatively high. Africa as a whole has avoided the runaway inflation that affected many countries in Latin America and the transition economies. Aggregate inflation has not decreased over recent years although price rises have moderated sharply elsewhere in the world. One reason for the continued high inflation has been the relatively rapid growth in money supply against a background of stagnant real income.

Aid flows to Africa in dollar terms and as a share of GDP have risen over the period until 1995. Table 2 shows that in 1980, net development assistance to SSA (excluding Nigeria and South Africa) was 6.5 percent of GDP. By 1995 it had reached 12.5 percent of GDP. Since then, the aid flows have decreased slightly, but remain above 8.5 percent of GDP. By contrast, foreign direct investment has remained a small component of total resource flows to Africa.

Based on these data, there has been little structural evidence suggesting that income growth rates will improve markedly over the short or medium term. Individual countries have shown varying rates of progress (masked by the aggregate data). However, as a region, Africa faces some dramatic adjustments if growth and development are to become the norm. In the following sections, we examine each of the key components of macroeconomic management to determine how they might contribute to these objectives.

3. Fiscal and Monetary Policies

a. Fiscal Policy

Fiscal policy is a key element in any attempt to achieve macroeconomic balance. Yet, for most practical purposes, fiscal policy is not a flexible means of managing the economy. Adjustments of taxes and expenditures to offset short run variations in demand from other sources are too slow and cumbersome and too vulnerable to political pressure. For longer run purposes, however, fiscal policy must adapt to changing circumstances. It is especially important to adjust revenue and expenditure programs when supply changes as a result of terms of trade shocks and other factors that affect the nation's productive potential. As already noted, failure to deal effectively with terms of trade shocks played a major role in the disastrous experience of African countries in the 1970s. Many of Africa's economic difficulties from the mid-1970s onwards resulted from the lack of fiscal adjustment (Lewis and McPherson 1994; Schmidt-Hebbel 1996; Ghura and Hadjimichael 1996).

The major long run contribution of fiscal policy to economic growth is to encourage the most efficient use of all resources available to the government. A further contribution is through expenditures which sustain (and hopefully enhance) future productive capacity. This is one reason why so much attention is given to the protection of health and education expenditures during structural adjustment. Too often, these items are cut in order to balance the budget.

Physical capital is scarce in developing countries and it should be allocated where it is most productive. Reflecting the scarcity of capital, governments ought at the very least to generate a surplus in their current budgets. This would raise the national savings rate, thereby adding to the real supply of capital in a non-inflationary way. Moreover, as a general principle, governments should not let their capital expenditures exceed the current budget surplus unless there is compelling evidence that their marginal expenditures have a higher social yield than the private alternative use of those resources. There is so much fakery in project evaluation that the public sector should not presume to finance its capital outlays with credit.⁵ Indeed, we suggest that institutional arrangements be established that rely on external evaluation for controlling access to credit for capital outlays.⁶

A further issue is whether development budgets should be separate from other government expenditures, or whether, as in the United States, governments should adopt a unified budget (Smithies 1955; Points 1990). When governments split the tasks of budget management between ministries, institutional rigidities and inefficiencies emerge. Largely for this reason, many African governments have been reintegrating their ministries of planning or "national commissions for development planning" with their ministries of finance. Zambia is an example. As part of the civil service reorganization, it amalgamated the National Commission on Development Planning with the Ministry of Finance creating the Ministry of Finance and Economic Development. The intention has been to bring all expenditure and revenue operations (including debt finance) under a central authority.

In making such changes, governments have begun to accept the view that the public sector has an obligation to allocate its expenditure across broad categories in ways that (roughly) have the same marginal return. Similarly, on the revenue side, governments have also begun to agree that revenue should be raised in ways that impose (roughly) the same marginal opportunity cost across revenue sources. In practical terms, budget officials should be concerned about the distortions they create in their expenditure and revenue operations. Equalizing the marginal effect of these respective operations helps impose discipline on the budget process.

Monetary management becomes exceedingly difficult, if not impossible, when the central bank is expected to finance government deficits. These deficits have a number of causes including unsustainable increases in public expenditure (associated with large wage bills, subsidies to loss-making SOEs, *etc.*); poor governance and lack of accountability; inattention to the efficiency of investment; and low rates of resource mobilization (due to weak tax enforcement). Easy access by the government to central bank credit undermines both budget discipline and attempts by the central bank to control inflation. However, if under these conditions the central bank wants to control inflation, it will be forced to crowd out private borrowing by credit rationing or through high interest rates.

Similarly, government sanctioned borrowing from commercial banks by SOEs has had ruinous effects on many African banking systems. Bank credit to SOE's, quasi- and non-governmental organizations, and similar entities should be avoided. Yet, the history of governments everywhere demonstrates that financial excess is difficult to suppress. The United States Government bills itself as the greatest defender of private enterprise but it is also the world's

largest lender. The point is that rules will be circumvented when governments are determined to do so. The foundation of fiscal discipline is self-restraint. This is something about which economic theory has little to say.

Nevertheless, fiscal irresponsibility and its monetary implications can be limited if fiscal operations can be made transparent. Wherever possible, borrowing by governments and their agencies should be done by the sale of securities in the open market. Moreover, government financial operations should be subject to audit by an organization that is not controlled by the government itself.

As a final point, the tangle between external debt and foreign aid needs to be unraveled to help reestablish budget discipline. For most African countries, debt service represents an insupportable burden. Outright debt default is avoided only by continued aid flows. The complete write-off of debt is prevented by the adverse behavioral dynamics this might create. Wiping out debt can only be seen as promoting fiscal irresponsibility.

While the current level of debt may be higher than most governments can service, African governments should prepare for the time their debt will be rationalized. They can do that by adopting procedures to sharply limit public sector borrowing and the assumption of contingent liabilities. They can also begin to reestablish fiscal discipline by working down their arrears and unraveling their interlocking debt with public enterprises.

Implementing budgets without excessive reliance on credit creation or foreign aid requires professional standards in revenue estimation, special arrangements to control expenditure such as a cash budget, control over expenditure authority, and detailed audits. Since revenues and expenditures are invariably influenced by unexpected events, budgets should always include a reserve for contingencies. Detailed procedures need to be worked out in advance for gaining access to those funds.

b. Monetary Policy

By contrast with fiscal policy, monetary policy can be continuously adjusted without lengthy decision or implementation lags. Unfortunately, problems arise because the lags between monetary actions and their effects on economic activity are long and variable. The consequent need to forecast economic conditions many months ahead, combined with the general uncertainty about the magnitude of the effect of any monetary action, greatly complicate the tasks of monetary managers seeking to maintain steady demand growth in a changing environment.

In promoting their monetary policy objectives, central banks have one primary instrument: control over the supply of reserve money. If they exercise that control through a treasury bill auction or open market purchases and sales of securities, their decision about the size of the change in reserve money also determines the treasury bill rate. Given other factors affecting reserves, choosing a target for the change in reserve money determines which bids must be accepted. The lowest price (highest interest rate) accepted will determine the market rate on bills. As an alternative, the central bank might choose an interest rate target. This will determine which

bids will be accepted and thereby the amount of reserve money injected or withdrawn from the market.

In the first case, the bank chooses a target for money growth and accepts the resulting interest rate. In the second case, the central bank chooses an interest rate target and accepts the resulting money growth. Every central bank has to decide which instrument it will use and establish criteria for adjusting that instrument in response to changing circumstances. Part of the dilemma facing central banks is that they have so little leverage over the monetary system and so many variables – economic growth, interest rates, savings, investment, money supply, and the exchange rate – that appear to be subject to their influence.

A common mistake is for central banks to believe that with the one instrument at their disposal they can simultaneously and efficiently influence several variables. For example, in mid-1995, the Bank of Zambia trapped itself into attempting to force down interest rates, control the growth of reserve money (in order to reduce inflation), and prevent the exchange rate from depreciating. After many interventions that included the manipulation of rates on treasury bills⁸ and the *de facto* reimposition of exchange controls, the central bank lost control of the situation. Due to capital flight and resurgent currency substitution, the exchange rate sharply depreciated, interest rates rose and inflation accelerated.⁹

The Search for Guidelines: As a means of avoiding the types of ad hoc adjustments to monetary growth or interest rates in pursuit of their policy objectives, central bank officials have attempted to derive a variety of systematic procedures to guide them. For at least twenty-five years economists in developed countries have sought rules or guidelines to supplant the discretionary policies of central bank managers (Duesenberry 1983; Schwartz 1989; Fuhrer 1997; Mankiw 1997, pp.375-379; Mishkin 1999). The intensity and persistence of the search reflects the failure of efforts by central banks to find a satisfactory compromise between inflation and unemployment as well as a widespread shift toward reliance on markets rather than regulation. At the same time the persistence of the search reflects the difficulty of finding satisfactory rules for guiding monetary policy.

At the height of the so-called "monetarist revolution", there was a widespread belief that central banks could take advantage of what was seen as a direct link between money supply and nominal income. However, experience showed that the link was not as tight as had been hoped. This is a consequence of what is known as Goodhart's Law. It asserts that variables used for policy purposes lose their relevance over time as market (and institutional) behavior adapts (Goodhart 1989). As a result, central banks have returned to the practice of manipulating short-term interest rates in response to signals indicating that aggregate demand is growing too rapidly or too slowly relative to the growth rate consistent with central bank objectives. The general objective has been labeled "inflation targeting."

The decision process involves, first, an explicit or implicit choice of objectives for inflation, unemployment and (perhaps) additional variables. Second, central bank managers have to use available data to forecast the probable future performance of the economy on the basis of current policy, and then assess the effect of alternative policy scenarios. Since forecasting is subject to error, the consequences of alternative outcomes for each policy choice must be evaluated.

Monetary policy must be made in situations in which there is a long lag between policy action and its effects. Moreover, the magnitude of those effects varies and the channels through which monetary policy works can change. Finally, the outcome can be effected by non-monetary factors outside the control of policy makers. In these circumstances, the principles of optimal control need to be invoked. Policy makers should act frequently, taking small steps in the direction indicated by the policy objectives. In the developed countries, formal econometric models help in providing the general directions of change. Yet, apparently small differences in model structure produce substantial differences in the policy implications of competing models. Therefore, decision makers should never rely on the results of a single model or procedure. They need to supplement the results of the models through informal consultations that reflect many detailed aspects of the current situation not included even in very large formal models.

Policy makers in developing countries face great difficulties since they must operate with a limited database that is often of poor quality. At the same time, the setting in which they operate is volatile. Under these conditions, one must be concerned about the likelihood that *ad hoc* judgements based on inadequate information may create a policy response that alternates between inaction and panic. To avoid large errors and defend themselves against political pressure, policy makers tend to favor orderly procedures over rigid rules.

The central elements in an orderly procedure for monetary decision making include the selection of targets for the growth of output and prices together with the choice of "instrument settings" for changes in money supply and interest rates. A systematic procedure for monetary policy decisions can be based on a monetary (or financial) program established for a fiscal year, often with quarterly revisions. The program provides guidance for short-run, week-to-week operational procedures. Deviations from the program path need to be justified.

Routine Monetary Operations: Economies that have achieved basic balance and a reasonable degree of price stability are still subject to change. Monetary policy must continuously adapt in ways that keep the system "on track." This implies that nominal demand should increase in line with potential output and an acceptable rate of inflation. In those circumstances, two difficulties arise in monetary management.

First, our general ability to forecast future economic events is limited. So is our knowledge of the differential impact of any monetary policy action. Second, because monetary actions influence output and prices only with long and variable lags, central bank managers need to make frequent small adjustments of policy in the direction indicated by their forecasts. In the absence of any large shocks, prices and outputs will deviate from desired values, but the application of frequent policy adjustments will tend to move the economy toward the target path. Those adjustments could be made in response to signals predicting price and output changes as well as to actual changes in prices and outputs. A suggested periodic adjustment procedure is discussed below.

Policy adjustments may be made in terms of the rate of growth of a monetary aggregate, e.g. money supply, or bank credit. Alternatively adjustments may be made in terms of changes in a short-term interest rate under the control of the central bank. Since one cannot reliably predict the effect of either measure, and since they reflect somewhat different aspects of the economy's

behavior, it is useful to compromise. One way of doing this is to set a money growth target subject to upper and lower limits for the interest rate. One could also use the reverse procedure setting an interest rate target subject to upper and lower limits for growth of reserve money. Either procedure will be implemented as part of the system of buying and selling government debt. Since many countries have now introduced regular bill and bond tenders, this will be the main mechanism for determining limits on interest rate movements and/or limits on money supply changes.

In the absence of any information indicating a change in the balance between supply and demand, the appropriate reaction will usually be to maintain the growth rate of money supply or to keep the short-term interest rate steady. But since conditions are always changing in domestic and international markets frequent adjustments will be necessary.

Available data on prices, outputs and balance of payments indicators should be reviewed before each bill auction or tender. The whole program will have to be reviewed at least quarterly or whenever there is any notable change such as in projections of crop production or export prospects. The main outcome of those reviews would be to identify the extent to which prospective deviations from the monetary program indicate the need for action to speed up or slow down the growth of nominal demand. Such a decision would imply the need to raise or lower interest rates. Determining how fast to adjust would depend on judgements about the size of the deviation (of nominal income growth) from the program target and about the certainty of those judgements. In most cases, central bank officials would be wise to heed the injunction that "if you are not sure where you are going, don't go very fast"

That prudent approach cannot prevent mistakes, but if taken seriously it should prevent costly and persistent policy errors. Nonetheless, such a cautious approach must be modified if there are major shocks.

Response to Shocks: Demand shocks may arise from government expenditures, export earnings or very occasionally from domestic investment booms. Inflation problems often emerge from supply shocks such as occur with sharp increases in food or oil prices, or the devaluation accompanying major shifts in the terms of trade. If the central bank accommodates the initial price increase by raising the growth rate of money and credit, it can set off an inflationary spiral. That is especially likely if the government uses bank credit in an attempt to maintain the real value of its expenditure. A rule of minimal accommodation to supply shocks is essential if price stability is to be maintained.

Indeed, the basic rule for dealing with shocks is: *finance temporary shocks*; *adjust to permanent shocks*. The problem, of course, is that we often do not know how temporary or persistent any shock may prove to be.

In this case, a viable operational procedure would be as follows. Do not allow either monetary or fiscal policy to accommodate supply shocks. Let the exchange rate float and do not allow either monetary or fiscal policy to accommodate any inflation induced by exchange rate depreciation.

In the case of positive demand shocks, when export earnings surge, the reserve money generated by the increase in net foreign assets should be offset by other factors affecting reserves, including the sale of treasury bills (on behalf of the central bank and not for government account). Bumper domestic crops or reduced import prices require no action.

Faced with an adverse supply shock, the central bank should adhere to the credit growth path. Budget expenditures should not be increased in response to the price shock. The exchange rate should be allowed to float. This will cause further price increases. But, if there is neither monetary nor fiscal accommodation, prices will stabilize (albeit at a higher level) and output will be lower than before the shock. If the shock is reversed the process will also reverse but typically not fully due to non-linearities in the system. Some further adjustments may be required to deal with these effects but the shock will have done no permanent damage. If the shock persists output will, of course, have to fall. Moreover, just as in the case of the transition discussed above, the lags in the response of exports to exchange rate changes may force a painful temporary compression of imports and domestic consumption unless the gap can be filled by foreign aid or the use of foreign reserves.

For small or short-lived shocks the "no accommodation" rule may suffice, but a large and persistent adverse shock requires some form of interim adjustment to cover the "J curve gap." In this regard, some sort of "compensation for shock absorption" component in the aid program could be a useful tool in promoting stabilization. Yet, in order to be effective, this type of supplementary aid should be provided only to countries which have carried out the kind of adjustment program outlined above. ¹²

Disinflation: In the transition process, the contraction of domestic absorption to sustainable levels may not eliminate inherited inflation. If the exchange rate moves with prices, import prices will tend to follow domestic inflation. In other sectors, expectations of continuing inflation may weaken the response of prices to downward shifts in demand.

A successful disinflation cannot be achieved unless the government and central bank maintain firm control of the budget and growth of bank credit at rates that keep the growth of nominal national expenditure below the inherited inflation rate. Efforts to limit exchange rate depreciation in order to reduce the feedback from domestic prices to import prices are dangerous. They simply deal with the symptoms of the problem, not with the problem itself. An essential feature of any successful disinflation is to break existing patterns of expectations. Workers, especially those employed in the public sector, expect cost-of-living adjustments because such adjustments have been made in the past. These have to be eliminated or, at the very least, postponed.

Governments need to demonstrate their willingness to implement a non-inflationary budget in the face of distributional problems and some reduction in employment in urban sectors. To do this, the government will need to take special measures to ensure that its budget is implemented as proposed. It must also be willing to face strikes and take other unpopular actions. While a willingness to take short term political losses is essential, disinflation programs cannot succeed unless there is underlying, if not explicit, public support for the overall objective of eliminating inflation.

4. Exchange Rate Management¹⁴

A crucial component of macroeconomic policy in any country is the exchange rate regime. The basic objective is to establish an exchange rate consistent with market supply and demand, thereby stabilizing the external account. With such an exchange rate in place, the key management issue is how to respond to shocks affecting the balance of payments. To improve economic management, policy makers should consider, in advance of the (inevitable) balance of payments shock, the relative merits of different approaches to adjustment. These include financing the imbalances, changing a pegged exchange rate, allowing the market to modify a floating rate, and/or restricting domestic demand. From time to time the authorities may change their preferences among these options. That choice will typically depend on the type of exchange rate regime to which they are committed. There are three that have been used by African governments.

First, they may seek to maintain indefinitely a fixed rate *vis-a-vis* some currency or basket of currencies. They will adjust to external balance of payments shocks first by using reserves and/or borrowing, then by fiscal and monetary measures, and only as a last resort by establishing a new parity that is then proclaimed to be a permanently fixed rate. At present, this procedure is followed by the fifteen franc zone countries, including the Comoros Islands.

Second, they may choose to allow their exchange rate to float. As of June 2000 (reflecting recent data), 30 SSA countries had exchange rate regimes classified by the IMF as either "independently floating" (24) or "managed floating with no pre-announced path for the exchange rate" (6 countries) (*International Financial Statistics* December, 2000, pp.2-3).

Third, they may follow some intermediate course, modeled on the original Bretton Woods approach. A fixed exchange rate is used to help anchor domestic demand, but there is tacit recognition that under some conditions the relative cost of defending the existing exchange rate may be too high. This approach can be identified with six other countries that peg their exchange rate to the South African rand (3), the Portuguese escudo (1), or some composite (2). One country, Djibouti, has a currency board.

In principle, African policy makers have been committed to managing their exchange rates in ways that maintain balance of payments viability, subject to maximizing resource utilization, keeping inflation within acceptable bounds, and minimizing the resort to protection. The pursuit of these objectives involves tradeoffs. Some under-utilization of resources is necessary to ensure price stability. Yet, the politically acceptable compromise between resource utilization (particularly of labor) and price stability differs among countries. The choice of exchange rate regime should be consistent with that compromise. A fixed exchange rate, for example, will be less appropriate when the degree of resource utilization is emphasized at the expense of price stability.

Finally, the choice of exchange rate regime will be influenced by short-run political considerations. Some of these are the desire by politicians to avoid the turmoil associated with balance of payments crises, concern over "losing face" if the national currency is allowed to depreciate too sharply, ¹⁵ and pressures from interest groups who benefit from or are harmed by

movements in the exchange rate.

These issues are examined in more detail in the following sections.

a. Fixed Exchange Rates

Until the great depression of the 1930s, fixed exchange rates tended to be the norm. Inflation, inconvertible paper currency, and exchange rate depreciation were universally deplored (Keynes 1931, section II). Support for fixed exchange rates was linked to support for stable prices. The specie-flow mechanism ensured that no country could maintain a differential inflation for long unless it gave up the gold standard. ¹⁶

Current support for fixed exchange rates, in developed as well as developing countries, derives from the view that such a regime requires the commitment to policies consistent with price stability. There are several reasons for this association. First, a fixed-rate regime is more transparent – a movement of the exchange rate outside an announced band is a definite event that can be monitored. Second, fixed exchange rates appeal to a historical association with "sound money." Third, a government's resolve to combat inflation is reinforced by the view that devaluation after a commitment to a fixed exchange rate represents a failure of economic management.

Nonetheless, commitment is often not the same as performance. A government can at any time announce its commitment to a fixed rate, with no guarantee that it will implement the necessary macroeconomic policies. International agreements to maintain exchange rates at a certain level have repeatedly broken down after costly efforts to support them.¹⁸

Two different sets of circumstances have led governments to abandon a fixed exchange rate. A burst of inflation, whatever its cause, can raise prices above those in competing countries. Restoring one's competitive position without currency depreciation requires that the initial rise in inflation has to be offset by a period in which the local rate of inflation is below that of the country's competitors. Côte d'Ivoire attempted to do this by cutting public sector wages in the early 1990s. The attempt failed. Even if it were technically possible to achieve, the benefits from protecting the fixed exchange rate may not be worth the cost in terms of foregone output – especially given the possibility that the cycle may have to be repeated.

Differential inflation is not the only cause of an external imbalance. Other factors include changes in the population's demand for imports or the world demand for a country's exports; differential rates of technological change; the appearance of new products which compete with a country's exports; and changes in transport and communication costs. Together with weather-induced fluctuations in harvests, these factors can result in large shifts in the terms-of-trade.

When changes are temporary, exchange rate adjustment can be avoided by use of reserves, borrowing, or demand restraint. Those measures are costly and if they fail there is no offsetting benefit. When the changes are permanent, depreciation is inevitable and delay is costly. Alesina and Drazen (1991) explain that stabilization programs are delayed because different groups within a society can deflect or shift the costs of not adjusting. Ultimately, all groups suffer as the

economy collapses. This was the experience in Argentina, Zambia, and numerous other countries that persistently postponed reform.

When an appreciated real exchange rate, i.e., a high ratio of non-tradable prices to tradable prices, undermines an economy's competitiveness, correcting this distortion quickly will support faster growth over time even if inflation is temporarily higher. A deflationary policy aimed at keeping the consumer price index (CPI) constant for a few years (or even reducing it) is a high cost way of realigning the real exchange rate. The stagnation that a number of African countries have undergone with such a policy is analogous to what the United Kingdom experienced in the mid-1920s and again in the 1950s and 1960s as it attempted to defend the (overvalued) fixed rate for the pound sterling.

Reviewing the experience of countries throughout Africa (and, indeed, the rest of the world), we find that nearly all have been forced to devalue for a variety of reasons. The most common of these are expansive fiscal and monetary policies, the accommodation of price increases resulting from supply shocks, or to offset persistent adverse shifts in the terms-of-trade. Without devaluation, all three developments require that home prices rise less rapidly than world prices. Most countries, including those in Africa, have found this to be too difficult and too disruptive.

Three main lessons about fixed exchange rate regimes emerge from this experience. First, fixed exchange rates should be pursued only when there is strong political support for price and exchange rate stability. Only then can one expect public support for policies that reduce demand pressures and do not accommodate the inflationary effects of supply shocks.

Second, for a fixed-rate regime to be beneficial, a country must be able to adjust to temporary adverse changes in the trade balance without devaluation. Doing this requires substantial foreign reserves and/or capacity to borrow. The country must also replenish its reserves and pay off its debt when circumstances improve. These actions require political support for a period of demand restraint until trade conditions improve. During periods of adversity, the government must be able to resist the pressure for protection that will undermine efficiency over the longer term.

Third, it is important to recognize when to stop supporting a fixed exchange rate. Adverse terms-of-trade shifts that persist for years can only be offset by depreciation of the real exchange rate. Unless the country reduces its inflation rate to a level below its trading partners, devaluation is unavoidable. The sooner it is done the lower the cost to the economy through inefficiency and lost output.

With one qualification, the first and second conditions have not been fulfilled in Africa, nor are they likely to be in the foreseeable future. The qualification is the franc zone (FZ) members, acting jointly through the BCEAO and BEAC, ¹⁹ achieved an extraordinary degree of price stability in the years prior to the devaluation of the CFA franc. This achievement, however, was not sufficient to offset the deterioration in the terms-of-trade and other factors (such as the accumulation of debt and rise in unit labor costs) that undermined economic growth and international competitiveness. The franc zone (FZ) arrangement is discussed in the annex.

b. Floating Exchange Rates

The opposite approach to fixed rates is to let the market determine the exchange rate with a minimum of intervention. The exchange rate then moves in ways that keep the external accounts in balance.

Floating rates permit a continuous response to changes in economic fundamentals. They are neutral with respect to inflation. As noted elsewhere, inflation results from inconsistent monetary and fiscal policies. The main advantage of a floating rate is that when inflation occurs, balance of payments equilibrium is maintained by automatic shifts in the exchange rate rather than demand restraint and/or trade restrictions. That said, it is not true that adherence to a floating exchange rate allows a government to conduct its fiscal and monetary policy without concern for trade and payments considerations. Countries require some prudent level of reserves whether or not the exchange rate is floating.

Floating rates are influenced by many aspects of economic policy and changes in the markets for goods, services, and capital. The exchange rate trend that emerges is not necessarily optimal or even satisfactory from the viewpoint of promoting medium- and long-term growth. A variety of temporary shocks – from weather to political disturbances in trading partner countries – can cause sharp fluctuations in the exchange rate. "Stabilizing speculation" may limit such fluctuations, but under many commonplace scenarios it can also aggravate them.

Elasticities of supply and demand are often significantly higher in the medium-to-long run than in the short run. Accordingly, a change in supply or demand conditions may cause the exchange rate temporarily to overshoot the level that would equilibrate supply and demand long enough to affect the return on capital investment. Again, stabilizing speculation may help, but it will not ordinarily be efficient (i.e., operate with an adequately long horizon) to resolve the problem altogether. The outcome is often the costly misallocation of resources.

Capital movements, actual and potential, can lead to sharp fluctuations in a floating exchange rate. When there is slack in the domestic economy, loan demand and interest rates fall. Other things being equal, the reduction in interest rates in one country causes capital to flow out thereby raising (i.e., depreciating) the exchange rate. Net exports rise, reducing slack in the economy, raising the return to local investment and making the export of capital less attractive. In such cases, capital flow has a constructive role.²⁰

But interest rate differentials are not always well matched to economic conditions and may lead to perverse or excessive exchange rate movements. Speculation based on guesses about future policy may be destabilizing. Finally, capital and exchange rate movements can be generated by speculation about political developments, with capital shifting from unstable countries to those considered safe havens. While these circumstances persist, even exaggerated relative differences in interest rates may do little to keep capital "on-shore". This was clearly illustrated by the extraordinary efforts made by Sweden in 1992 and several Asian countries in 1997.

The capital movements and exchange rate swings that followed the shift in U.S. fiscal policy in the early 1980s reflected all the forces just mentioned. No one argues that they kept the exchange

rate close to its medium term equilibrium. Developing countries are exposed to similar pressures. Indeed, due to the thinness of their foreign exchange markets, they are even more vulnerable. This reinforces a point that recurs throughout this study, namely, that appropriate macroeconomic management involves the prudent use of all measures available to influence the direction and momentum of the economy rather than the reliance on a small subset of policies.

Floating Rates with Capital Controls: Some prominent African policy makers, including many who accept the advantages of market-determined exchange rates for current transactions, argue that achieving a market rate high enough to discourage residents from moving their capital abroad would distort domestic resource allocation. It is widely believed that whatever the regime to which current account transactions are subject, African countries should control the outflow of capital other than repatriation of capital by foreign investors. Notwithstanding this view, empirical evidence from a wide range of countries demonstrates that liberalization does not lead to further capital flight. Indeed, the evidence suggests the opposite (McAuliffe and McPherson 1995, Ch.5; Knight 1998).

As of mid-2000, there were only three of the 48 SSA countries covered in the IMF's survey of exchange relations – Djibouti, The Gambia and Seychelles – that had total convertibility on capital as well as current account. All FZ countries, even before the lead-up to the 1994 devaluation, maintained capital controls, although these were probably the least costly in Africa to evade. When redemption of CFA notes outside the FZ notes was suspended during 1993 the rule proved unenforceable and this did no more than cause a modest rise in the transaction cost of exporting capital from the zone.

Most African governments emphasize their desire to attract foreign direct investment. In return, they allow investors to repatriate capital and earnings. Yet, many governments have maintained that the removal of capital controls would induce enough residents to invest their assets abroad to bring about a loss of capital, higher interest rates and/or a depreciated exchange rate. They also believe that removal of such controls would increase volatility in the exchange markets, given the sensitivity of financial flows to changes in expectations about prospects for inflation and other factors affecting returns on investment (Stals 1998). In practice, the experience has been the opposite, especially in countries that sought to remove other sources of macroeconomic imbalance.

For example, when The Gambia removed all exchange controls (January 1986) it also took steps to bring its budget into balance. This reduced the growth of the local money supply, helping to stabilize the exchange rate (Duesenberry and McPherson 1991; McAuliffe and McPherson 1990). Similarly, by the time Zambia removed all foreign exchange controls (January 1994), it had also made major progress in eliminating its budget deficit (through the introduction of a cash budget), reforming the financial system, rationalizing the external foreign debt, and starting to reorganize its SOEs (Lewis and McPherson 1996). The outcome was a period of general stability in the exchange rate that lasted, ironically, until the Bank of Zambia *de facto* reintroduced exchange controls (Hill and McPherson, 2001).

The objectives of encouraging foreign investment and curbing undesirable capital flows are contradictory. First, foreign investors want to be able to move funds for operating purposes and

for the purchase and sale of assets without regulatory complications. Any effort to distinguish acceptable capital flows from speculative flows inevitably introduces red tape creating opportunities for rent seeking. Second, it requires regulators, most of whom have little experience in business, to decide what resources are needed for real investment and what are not.²² Third, the presence of any form of capital controls leads foreign investors to perceive a risk that when balance of payments pressures arise the controls will be extended to include their operations. Brazil, for instance, froze all dollar accounts during the de Mello administration. More recently, Malaysia re-imposed capital controls. Both actions represented major reversals of previous liberal policies and both had adverse effects on investor confidence. Even when a high exchange rate appears to ensure a favorable return on investment in export production, the differences in risk may deter investment, sending foreign investors elsewhere and motivating residents to invest abroad.²³

The rationale for capital controls assumes that domestic investment opportunities facing African residents are inherently riskier than opportunities available abroad. In the absence of controls, asset-holders will have an incentive to invest abroad if the expected risk-adjusted returns there exceed those available locally. In most African countries, risks have been typically high due to political instability, lack of fiscal discipline, heavy-handed regulation, corruption, fluctuating terms-of-trade, periodic crop failures, and lack of leadership (Ravenhill 1991; Easterly and Levine 1995; Thomas 1996; IRIS 1996; Collier and Gunning 1999; Gray and McPherson,2001 (Ch. 5)). These are frequently the result of imprudent government policies. Imposing exchange controls to counteract their effects misses the point.

Avoiding large losses of resources requires policies that promote economic stability and assure foreign *and* local investors of an acceptable expected return. Once investors begin to perceive a decline in risk, the main rationale for capital controls largely disappears. Changes in expectations may induce periodic volatility in exchange rates. As already noted, these cannot be alleviated by capital controls.

But, even when policy makers accept this view, many argue against the removal of capital controls before the stabilization process is completed and confidence is restored.²⁴ In fact, under the best circumstances, capital controls have been poorly and unevenly enforced in most African countries. Wealthy residents hold assets abroad and move funds readily in response to changing conditions and expectations. Indeed, their efforts to shift funds abroad and keep them there are reinforced by the expectation of more intensive enforcement. Meanwhile, the less well off who do not have ready access to methods of evading controls and/or are more law-abiding, face costly barriers in seeking to move their funds. The social and political costs of these unequal opportunities are compounded by the corruption that accompanies the evasion of controls.

In sum, there is a strong case for removing all capital controls across Africa. Their cost as an inducement to capital flight, a barrier to investment, and a stimulus to corruption has been orders of magnitude greater than any potential advantages they might have had in stimulating economic growth. Finally, since capital controls do nothing to resolve the underlying imbalances in the economy, they represent an inappropriate policy response (Cooper 1999).

Dropping capital controls as part of a comprehensive stabilization program should improve

confidence. While some of the asset-holders who obeyed the old rules may move their funds out, the overall effect of abandoning weakly enforced regulations should be to reduce the pressure to export capital. Indeed, this has been the experience in many countries. Once the restrictions on capital movements are removed, capital usually flows in, not out.²⁵

Yet, whether African countries retain or remove capital controls, their long history of instability means that their real interest rates will be higher than those in the developed countries. ²⁶ Moreover, changes in expectations will continue to cause abrupt movements in both interest rates and exchange rates. The relative severity of these problems will diminish over time as confidence improves and measures to deepen the financial system take effect.

c. Managed Floating

Most policy makers recognize the disadvantages of fixed exchange rates. Yet, even though they have abandoned fixed rates, the outcome of floating rates has created dissatisfaction. Indeed, this has given impetus for the establishment of the European Monetary Union. Nonetheless, a return to fixed exchange rates is not the only alternative. In fact, pure floats are rare. Some form of official intervention in foreign exchange markets has been common.

While all countries face contingencies such that well-conceived (and efficient) intervention would yield results better than *laissez-faire*, the financial and technical resources for constructively influencing foreign exchange markets vary. Developed countries with ample reserves are able to exert only a marginal influence over their exchange rates. African countries lack the reserves, borrowing capacity, and many of the institutional requirements to do even that.

Nonetheless, governments and central banks can influence the trend of their exchange rates and reduce volatility through prudent fiscal, monetary, trade, and debt management policies. Market determination of exchange rates is strongly affected by macroeconomic policy and expectations of future policy directions. One cannot expect exchange rates to follow a stable course in the absence of consistent and realistic fiscal, monetary, and debt policies that hold nominal demand to a path that implies an acceptable rate of inflation.²⁷

Changing expectations about trends in inflation and real interest rate differentials are two major causes of short-run variations in real exchange rates. Prudent demand management and realistic interest rate policy dampen speculative capital flows and the ensuing exchange rate fluctuations.

As noted in the section on monetary policy, one way of controlling inflation is to set a target for nominal GDP growth and to implement monetary and fiscal policies consistent with that target. If nominal GDP grows at a rate equal to the sum of the growth of potential real output plus an acceptable rate of inflation, the problems of inflation and exchange rate depreciation will be minimized. There will be no bursts of excess demand, and supply shocks will not be accommodated. Shocks will initially cause domestic prices and the price of foreign currency to rise but that will force a reduction in real domestic absorption, thereby limiting the pass-through of the initial price rise to further wage and price increases. If inflation can be contained while interest rates remain subject to market determination, the volatility of exchange rates will be greatly reduced without direct market intervention.

Short-term movements: Nonetheless, short-term variations in export prices and export volume as well as capital market developments will at times cause temporary deviations of exchange rates from their medium-term equilibrium. Intervention that limits such movements can reduce losses. In practice, however, African governments generally lack the resources and forecasting capacity to undertake successful exchange market intervention. There is now considerable evidence from Africa and elsewhere to show that injudicious intervention typically exacerbates rather than reduces exchange rate volatility.

Proponents of floating rates often exaggerate the efficacy of stabilizing speculation by private operators, but no greater reliance can be placed on forecasting by government agencies. Indeed, speculators have every reason to suspect the authorities of wanting to keep rates constant and therefore being biased towards treating permanent shocks as transitory. Official intervention is socially useful only if the government systematically makes better judgments than the market and acts upon them. That criterion is rarely (if ever) met even in developed countries (Humpage 1990; McCallum 1999; Summers 1999; Humpage and Osterberg 2000).

However the market's speculation about government policy may create an exception to the rule. Expectations of rising inflation will at the very least cause a gradual increase in the price of foreign currency, and under some circumstances can produce a run on the local currency. If the market's anticipation is well founded, the appropriate action is to address the underlying problem, i.e., adopt fiscal and monetary measures that reduce inflation. In this case, pressure on the exchange rate creates a positive incentive for correct government action.

When the market incorrectly anticipates a shift towards a more inflationary policy, the government must, of course, reaffirm its commitment to stability. Such a statement of intent will rarely satisfy the market. It must be backed by credible actions.

One option is for the central bank to manipulate bank reserves and reserve requirements in ways that generate a spike in interest rates. Though initially disturbing to domestic financial markets, such a step may help to stop a run on the currency as long as it forms part of a package of measures demonstrating the government's adherence to overall macroeconomic stability.

Direct intervention through the sale by central banks of foreign exchange is limited by the availability of foreign reserves, but those sales should not be ruled out altogether. A case for limited intervention may arise when a government needing to build up foreign exchange reserves finds the exchange rate appreciating. Building up reserves during such a period moderates transitory upswings, thereby dampening the pressure for subsequent downswings. For instance, the government of The Gambia took advantage of upward pressure on the exchange rate in 1986 to accumulate foreign exchange reserves.

Once acquired, reserves can supplement other stabilization measures. Few African countries will have sufficient reserves in the foreseeable future to be able to resist firmly held perceptions by market participants that the exchange rate change will depreciate.²⁹ But when other stabilization measures are in place, selling foreign exchange may satisfy enough of the remaining speculative demand to stabilize the market. In considering direct entry to the market, the central bank has to

balance the costs of market volatility against the prospect that action by the bank may preempt dealer activity.

Even a relatively stable market will experience daily and hourly variations in rates due to minor imbalances between the inflow and outflow of foreign exchange. If the trading is well organized, with dealers prepared to make a market in foreign currencies, most of these imbalances will be absorbed with minor variations in spreads. However, when the exchange market has just been liberalized and participants are inexperienced, dealers may not be prepared to take positions for small returns. Information will flow imperfectly. Since most African countries now have a long history of flourishing parallel foreign exchange markets, this is not likely to be an important consideration. Yet, market operators may remain hesitant to aggressively "make a market" if they doubt the government's commitment to liberalization. This doubt will only be removed if the government continues to maintain a consistent policy even in the face of intense pressure on the exchange markets.

Seasonal variations in exports, large payments for debt service, and lumpy receipts of foreign aid all exert pressure on exchange rates. The government needs to manage its own foreign transactions in ways that do not unnecessarily disturb the market. On the other hand, dealers should be expected to dampen fluctuations associated with the crop cycle. When a large proportion of foreign exchange receipts is channeled through the government, the central bank may improve the efficiency of the market by developing a pseudo-market in foreign exchange along the lines discussed with respect to bank reserves in the section on monetary programming.

How to Manage a Float – Conclusions: The situations discussed above do not cover all potential sources of instability in foreign exchange markets, but they suggest a framework to which the following policy considerations apply.

First, the objective of exchange rate policy should be to maintain a real effective exchange rate at a value that meets the balance of payments constraint and provides adequate incentives for exporters. It is helpful to regard such a rate as a "real adjustable peg," where the peg is a target ratio between the real values of the national and foreign currencies, rather than an explicit buying or selling price. The target should be adjusted to reflect persistent changes in conditions affecting trade. The authorities should use indirect, i.e., market-based, instruments to reduce any discrepancies between nominal market exchange rates and the target.

Second, it is not possible for most African countries to control market exchange rates. Policies that affect exchange rates should be guided by the first objective. By fixing their nominal exchange rates, the franc zone countries have effectively limited their ability to influence their real exchange rates.

Third, if the authorities can adhere to a policy of maintaining steady nominal GDP growth at a rate consistent with the country's real potential output and an acceptable rate of inflation, the market exchange rate should follow the path described above.

Fourth, short-run disturbances will cause deviations from the target path. Given limited foreign reserves and uncertainty about the market's reaction to intervention, the monetary authorities

should not seek to counteract market-based shifts in exchange rates within a fairly wide band.

Fifth, it will be appropriate to exploit temporary pressures for appreciation of the national currency to accumulate reserves.

Sixth, speculative capital movements may sometimes move exchange rates significantly off the target path. If the authorities believe that the movement will be costly to the economy, for example, by damaging exporters and export incentives, there is a strong case for taking action to check the movement. Appropriate instruments for this purpose include the use of foreign exchange reserves, changing domestic interest rates to influence capital flows, and adjusting fiscal policy. The adjustment of reserves alone will normally be inadequate to reverse major changes in exchange rates and revive confidence.

Seventh, exchange rates are likely to fluctuate widely following the liberalization of foreign exchange markets. If reserves and/or borrowing capacity permit, the authorities may wish to intervene to counteract movements they consider excessive. In all but extreme cases, they will be better advised to resist the temptation. The interplay of disinflation and adjustments in foreign exchange and interest rates is a dynamic process made even more complex by external and internal shocks and policy shifts.

Given their limited resources as well as forecasting ability, African governments would be best advised to let the adjustment process play itself out. Intervention often has effects opposite to those intended. The longer a government sticks to a package of stabilization policies, the greater its credibility and the faster the market will settle down. Meanwhile the central bank and ministry of finance can begin to develop the necessary database and instruments so that their limited efforts to stabilize exchange rates will support the growth process.

5. Debt Management³⁰

The fundamentals of debt management have been well covered in the literature (Cline 1988, 1995; Griffen 1988; Sachs 1989; Parfitt and Riley 1989; Premchand 1993). They deal with the relationship between the change in the national debt stock and the financing requirements associated with changes over time in the public sector borrowing requirement (PSBR). Since all deficits have to be financed and (the nominal value of) all sovereign debt has to be honored, changes in the PSBR (including those induced by debt service) directly link the management of the government budget to the management of the public sector debt stock.

While the fundamentals of debt management are well known, few countries in Africa have been in a position over the last two decades to deal with their debt in a "normal" or "optimal" way. With only a small number of exceptions, of which Mauritius and Botswana are obvious examples, the majority of African countries has debt stocks that are large relative to their GDP. Debt service payments dominate the budget and absorb large portions of foreign assistance. For these countries, the most pressing debt management issues are to reduce the stock of debt, lengthen its maturity profile, and reduce the annual flow of debt service. Some countries continue to incur large external and domestic arrears. These need to be rationalized if growth and development are to resume. Moreover, since much of the past borrowing was used to support

consumption and prop up over-valued exchange rates, most African countries gained little in the way of increased capacity to generate income and wealth. Accordingly, it is important that the debt is managed so as to minimize the dead-weight losses associated with the repayment and restructuring of past borrowing that was essentially wasted.³¹

Most of the present debt problems in Africa began to emerge during the 1970s in response to the oil and food shocks. The options available were to finance the macroeconomic imbalances generated by the shocks, or to adjust. The majority of African countries attempted to finance the imbalances. The shocks proved to be permanent. Consequently, many countries quickly encountered difficulties. Zambia, for instance, borrowed heavily from private creditors in the mid-1970s. By 1978, it was already having difficulty meeting its debt service in full and on time (GRZ/UNICEF 1986, p.36). A similar situation arose in many other countries. Total external debt in SSA, which had been around US\$7 billion in 1970 (equivalent to 11.5 percent of GDP) rose to US\$84.1 billion (31.8 percent of GDP) in 1980 and US\$230.6 billion in 1995 (or 72.6 percent of GDP) (*World Development Indicators* 1998:Tables 4.2, 4.17). With large amounts of debt relief and extraordinary balance of payments support, the debt stock was \$230.1 billion in 1998 (equivalent to 68.9 percent of GDP).

While the oil and food shocks precipitated many of Africa's debt problems, other factors contributed. As noted earlier, many African countries have been unable to contain their budget deficits. Some observers attribute the debt to the continued exploitation of African countries within the context of the broader (capitalist) world economy (Amin 1974; enda 1990). A further factor has been that many countries remain heavily dependent upon a narrow range of primary products for their export revenue. Swings in supply (due to drought, disease, or transport disruptions) and demand (due to fluctuations in economic activity and changes in consumer preferences) can lead to sharp variations in revenue. For example, Nigeria derives more than 95 percent of its export receipts from oil while coffee supplies a similar proportion of Uganda's export earnings. Such over-dependence on one commodity has been often reinforced by other macroeconomic policies such as the over-valuation of the exchange rate. That issue was discussed earlier.

The availability of concessional finance has compounded Africa's debt problem. Low interest rates and long grace periods tended to disguise from senior officials the build-up of gross levels of debt. This created two problems. First, the debt could only be sustained through continued access to concessional finance. Even that became a problem as countries fell into arrears with their external creditors. Second, due to their low-income status, the bulk of the debt of African countries is owed to official entities. These organizations do not normally reschedule their debt. Thus, working off arrears and rationalizing the debt profile has become a protracted and highly bureaucratic process. It has required numerous adjustment programs with the IMF, repeated Paris Club negotiations, London Club arrangements, and dozens of bilateral debt negotiations. Creditors, too, have become ensnared in this pattern of patchwork responses as the "debt problem" has intensified. To avoid the appearance of either writing off or rescheduling their debt, official agencies have created a variety of fudges. Examples are the "fifth dimension" facility, the now-defunct Rights Accumulation Program, and the HIPC initiative.

Because of its importance in macroeconomic management, it is vital that governments adopt a

systematic approach to debt management. The following sections examine the principles of public debt management, the methods by which the debt overhang can be rationalized, and mechanisms (including institutions and procedures) for avoiding future debt problems.

a. Principles of Debt Management

Debt management is concerned with two basic issues – when does it makes sense to borrow, and how can the debt stock and flow of debt service be administered in ways that do not overwhelm the government's budget and undermine macroeconomic stability. A third issue is how to reduce the debt in an orderly way when the debt burden begins to exceed a country's financial capacity.

Looking beneath macroeconomic aggregates, the decision to borrow hinges on the outcome of the government budget. Governments typically have four sources of finance: taxes and fees, the dividends and debt repayments of state-owned enterprises, transfers from abroad (i.e., foreign aid), and borrowing. The basic financing decision problem for any government, given its expenditure priorities, is to optimally combine the four sources.

A well known result in the theory of public finance is that social welfare is maximized when public resources are allocated so that the marginal social benefit of additional expenditure is just offset by the marginal social opportunity cost of raising the additional revenue. This marginal calculus carries over from the aggregate to each sub-category of finance as well. Thus, from the point of view of financing government activities, the theoretical choices hinge on the relative benefits and costs of different types of financing – taxation, domestic borrowing, foreign borrowing, profits of state-owned enterprises, and foreign aid (with its associated conditions).

In practice, financing decisions create major distortions. Debt typically fills the gap once the government's revenue from taxes, profits, and aid is exhausted. Any balancing of the marginal gains with the marginal costs emerges as a matter of coincidence rather than design. This has been especially true across Africa. With few exceptions, African countries have borrowed well beyond the limits that would have emerged from any rational comparison of potential benefits and costs. Indeed, many African countries were already caught in a debt crisis well before the default by Mexico in 1982 focused the attention of the world financial community on the debt problem. The problem of the world financial community on the debt problem.

Understanding why governments over-borrowed is one thing. Determining how to deal with the problem is another. There are several considerations. First, the dynamics of a country's debt are directly linked to government's approach to fiscal and monetary policy and exchange rate management. Second, the inefficient use of borrowed resources is a generic problem that applies to the use of all resources by a particular government.³⁷ Governments do not use wisely their tax receipts and dissipate their borrowed resources, or vice-versa. Degrees of inefficiency tend to be generalized. Third, as an accounting matter, all public sector deficits are financed, even if some financing occurs in the form of payment arrears.³⁸ Fourth, in principle, all public sector borrowing has to be serviced in full and on time. Moreover, all public sector loans have to be recovered. And fifth, public debt management should be conducted in ways that do not undermine macroeconomic stability or put undue pressure on the exchange rate.

By looking at standard national accounting identities (Helmers 1988; Reisen 1989; Fischer and Easterly 1990), it is clear that there is a direct link between debt management and the government's decisions on matters related to fiscal and monetary policy and the exchange rate. For instance, the decision to finance the deficit without raising additional taxes or cutting expenditure has direct implications for the stock of debt and the future flow of debt service. By pre-empting future expenditures, the latter, in turn, influence the budget. Similarly, a decision to maintain an overvalued exchange rate leads to an excess of imports over exports thereby raising the nation's stock of external debt.

b. Basic Issues in Debt Management

A number of practical debt management issues have been important in Africa. They include interlocking arrears, the rescheduling and reorganization of debt, government lending and contingent liabilities, debt sustainability, and the feedback from debt to macroeconomic management. A debt-related issue that received extensive treatment in the literature is Ricardian equivalence.³⁹

Interlocking Arrears: Interlocking arrears arise when the government and SOEs do not discharge their mutual debts. At their most basic level, such arrears are evidence of the breakdown in budget discipline. They are more common in periods of severe budget restraint. Arrears, however, are also a consequence of the "games" that arise between a government and its various agencies. During periods of budget stress, the government might decide not to pay one or more of its agencies because they have been lagging in their payments to the government. These could be taxes, fees, dividends, debt service, or the pass-through of taxes collected on behalf of government. Such tit-for-tat behavior might be justified if it were part of a broader attempt to enforce discipline on public agencies. It frequently spins out of control as other public agencies stop discharging their mutual debts as well. Yet, even if the process does not escalate, the build-up of interlocking arrears sets an unfortunate precedent. Budget problems are deflected rather than addressed.

In some cases, however, the government itself may be the source of non-payment. It may not want one of its agencies to repay. This tactic allows the government to subsidize particular activities or enterprises without making a direct payment or raising a loan for the agency. The "cleanest" approach from a budgetary standpoint would be to make a direct transfer to the agency. For political reasons (typically on equity grounds) this might not be acceptable.

Interlocking arrears would be significantly less disruptive if the government and its agencies correctly accounted for and acknowledged their mutual obligations. In most cases, however, little is known about what is owed and how long it has been outstanding. Moreover, these arrears typically remain buried in undisclosed (and undiscovered) accounts until well after an economic restructuring program is underway.

Rescheduling and Debt Re-organization: Over the last three decades, different African countries have been overwhelmed by the burden of debt and have accumulated arrears. These have been "worked out" through a variety of arrangements, often repeated several times. Bilateral donors have written off debts for the low-income countries. The Paris Club has rescheduled and

otherwise written down large amounts of bilateral debt under the "Naples", "Toronto" and other terms that have periodically been agreed by the major Development Assistance Committee (DAC) nations. The London Club has provided a framework for rescheduling commercial debts often based on concessional "refinancing" obtained from the World Bank or IMF. Other arrangements, including the Rights Accumulation Program with the IMF and additional concessional lending from the World Bank, have enabled African countries to stretch out their debt profiles and lower the annual amounts due for debt service. So far, no African country has formally defaulted on its public sector debt although a number of countries have not paid substantial amounts for long periods of time.

The effort to re-organize Africa's debts continues. Even under the best of circumstances, it will continue for a long time (ECA 1999, section 7). ⁴³ The Highly Indebted Poor Country Initiative (HIPC), which at one time was advertised as a "debt exit" strategy, has been exceedingly slow in taking effect. Most countries that are potentially eligible have not remained in good standing with the IMF so that of the debt write-down can be formalized and implemented. More important, even in its more recently 'enhanced' version, HIPC is not a debt exit strategy for eligible countries. Under the most optimistic scenario, most countries will continue to have unsustainable debt burdens. Nonetheless, this does not mean that African countries experience major economic distress from actually servicing their debt. Over the period 1970 to 1998, the net flows of foreign assistance to all countries in SSA (excluding Nigeria and South Africa) increased from 3.4 percent of GDP in 1970 to 8.5 in 1998. (The peak net flows were in 1994 at 14.3 percent of GDP.) Thus, on average this group of countries has not been servicing its debt on a net basis since 1970.

Government Lending and Contingent Liabilities: All governments provide loans for specific purposes. They also provide guarantees for loans taken by public agencies and private firms (e.g., exporters). At the time commitments are made, there is the expectation that the loans will be repaid according to an agreed schedule. (If this expectation did not exist, the government would simply be subsidizing the activity from its current expenditure.) Many government loans, however, are not repaid and many public agencies do not honor their commitments. Some entities default on purpose. This has been a regular occurrence when private firms receive loans that reflect political influence and cronyism. Some default is unintentional when, for example, a SOE (such as a public utility) is not permitted to charge fees that cover its costs. In these cases, resources provided by government are not strictly loans. They are quasi-equity.

A typical problem for governments is that at the same time as they are hard-pressed to raise finance to service their debts, many local organizations are experiencing similar circumstances. Thus, although governments are often large creditors, they are usually unable to recover their domestic loans in order to meet their other obligations. This adds to the government deficit, further exacerbating the debt problem.

There are many reasons for this. Attention tends to focus on the budget problems faced by government agencies. A common observation is that many of the loans made by government were for marginal (politically motivated) projects that (not surprisingly) failed to realize their potential. A less common observation is that the build up of these debts represents a general breakdown in budgeting. In the past, it was a common practice among African governments to

use "sinking funds" to systematically set aside the resources needed to service debt. This practice, firmly established during colonial times, was gradually dropped. It became more convenient and less costly to the current budget (when some provision should be made for amortization of existing loans) to assume that the principal repayments would be rolled over or refinanced from alternative sources.

Debt Sustainability: The basic idea of debt sustainability is that the ratio of debt to GDP remains within supportable bounds (Anand and van Wijnbergen 1989; van Wijnbergen 1989; Schmidt-Hebbel 1996). In aggregate terms, the stock of debt and flow of debt service has to grow at rates lower than the growth of real GDP and exports. If these growth rates get out of balance, the debt to GDP or debt service to export ratio will rise creating debt service difficulties.

Typical measures of debt sustainability are debt/GDP, debt/exports, interest payments/GDP, and interest payments/export revenues. (Ratios rather than levels are used to minimize deflator problems.) The ratio of debt to GDP is a measure of the debt supported by total economic activity. The ratio of debt to exports relates the debt stock to a measure of the activities that generate the finance to service the debt. The third ratio of interest payments to GDP is typically taken as a (rough) measure of a country's solvency. The last and most descriptive figure, the interest payments to exports ratio, is a measure (again, rough) of a country's liquidity. Since exports are the principal continuing source of foreign exchange this measure is particularly important. (The implicit assumption is that the principal can be rolled over or met by new disbursements.)

Several rules of thumb based on these measures are common. One is that the average growth of exports needs to exceed the average rate of interest on the debt. If the relationship runs the other way, the ratio of debt service to exports will rise over time.

One problem in African countries, generally overlooked in the literature, is that the collapse of income has undermined the "normal" approach to debt sustainability. When income declines, prudent debt dynamics would require that countries reduce their debt. Yet, when income declines the typical reaction of most African countries has been to borrow more heavily. This has exacerbated the debt problem and postponed further the time when the country can shed its "debt overhang."

The above ratios provide a guide to the overall burden of debt and its sustainability. They do not, however, measure a country's willingness to pay. That is more difficult to gauge because it cannot be separated from the predictability of donor support and debt relief and the types of adjustment programs being pursued. Most African countries, however, have formally remained committed to meeting their debt service largely because of the adverse knock-on effect that would flow from any formal decision to default (Eaton and Gersovitz 1981).

The flip side of debt sustainability is the idea of "sustainable deficits" (Anand and van Wijnbergen 1989). The basic approach has been to determine the level of financing (as a percentage of GDP) that governments can sustain on a permanent basis. So long as a rule can be agreed upon, it is simply a matter of arithmetic to derive the relationship between the budget deficit and growth rate of GDP to determine what is sustainable. However, from a

macroeconomic management perspective, the idea that deficits are sustainable is fundamentally wrong-headed, particularly in an African context. There are a number of reasons. First, it overestimates the capacity of African governments to aim for and achieve a particular deficit target. Second, it minimizes the dynamic effects of inflationary finance and the accumulation of debt. Third, the approach ignores the alternative arrangements which individuals make to defend themselves against taxes and inflation, and to take advantage of global financial arrangements. As explained earlier, these arrangements severely restrict the ability of government to continue deficit financing. Fourth, it fails to treat public sector savings in a positive fashion. To promote growth, governments do not always have to spend, and thereby incur deficits. Government saving can provide a major impetus to growth, especially if this change follows long periods of easy credit. (The theme of government as saver is taken up below.) Finally, from a long-term stabilization perspective, the budget deficit should be "balanced" over the cycle. Such an approach is based on the view that the long-term sustainable budget deficit is zero.

One implication of our research on mechanisms to restart and sustain growth and development in Africa is that few (if any) governments are in a position to run a deficit on a sustainable basis. Continued deficit financing simply adds to the government's debt, making any permanent solution to the debt problem unachievable (even if debt is written off).

Debt and Macroeconomic Management: It is important that debt management be undertaken in ways that are consistent with stable prices and exchange rates. Such a constraint should automatically rule out government borrowing from the central bank, i.e., money creation. There are now many examples of governments, unable to borrow abroad and unwilling to cut their expenditure, turning to their central banks for finance. This approach provides the government with short-term access to additional goods and services. At best, the gains from such actions are temporary even if the government is prepared to risk runaway inflation. Few real resources are actually transferred to the government and the cost can be inordinately high. The usual outcome is the erosion of confidence in the financial system, capital flight, and currency substitution.

Debt management can contribute to macroeconomic stability in a number of ways. The government can issue additional debt to absorb resources when there is a commodity boom. By selling debt the government can force up interest rates that may, other things equal, deter local asset-holders from transferring their resources abroad. In this way, debt management operates counter-cyclically.

A further contribution of debt management to stability is to ensure that the debt profile does not impose "lumpy" demands for foreign exchange to finance debt service. To do this, governments need to be able to fully account for their debt through a system that tracks payments, new loans, and the outstanding loans by sector. Such a system will be most useful when it encompasses *all* public sector debt, including the military. The government can then ensure that its borrowing authority is appropriately used and that the public sector as a whole avoids becoming overextended.

Ricardian Equivalence: The basic idea of Ricardian equivalence is that rational citizens will make no formal distinction between government finance raised as taxes or derived from borrowing (Seater 1993). More specifically rational individuals will be neutral with respect to

whether the government finances itself through taxes or borrowing. Taxes impose an immediate burden on taxpayers with no future implications. Debt, however, represents a stream of future taxes needed to cover repayment. Although the idea has appeal, especially the notion that taxpayers understand that current borrowing imposes future tax obligations, there is no empirical evidence that taxpayers in Africa behave this way. All of the empirical evidence in support of Ricardian equivalence has been derived from developed countries where debt burdens are relatively small. Although the idea could be attacked on theoretical grounds, particularly regarding the role of expectations, ⁴⁶ it unravels in an African setting for a number of practical reasons. ⁴⁷ Tax systems and tax incidence are highly unpredictable. Because of the prevalence of donor financing, the link between taxation and debt service is tenuous at best. (This has already been noted above.) Due to currency substitution and other arrangements (including outright fraud) most taxpayers significantly and unilaterally reduce their tax burden. And, because of the overwhelming size of the debt in most African countries, its potential dynamics dominate the determination of expected movements in interest rates and exchange rates. These have far more significance for decisions to save and invest than current (or future) tax rates.

c. Policy Reform for Sustainable Debt Management

A host of remedies have been offered for Africa's debt problems. The literature has many proposals for debt write-downs, write-offs, stand-stills, and more comprehensive economic reforms designed to "out-grow" the debt. Yet, irrespective of what happens in these areas, three issues deserve far more attention than they receive at present. They are the direct measures to reduce the government's need for borrowing, improvements in the debt database so as to avoid destabilizing surprises, and methods of improving the efficiency with which borrowed funds are used.

Government Savings: Perhaps the least emphasized remedy for the debt problems of African governments is prudent government behavior. Vital for this is the elimination of the government deficit. The implication is that African governments should contribute to, rather than subtract from, national savings. Having the government generate savings is not a new idea. A budget surplus used to be considered the hallmark of prudent fiscal management. Indeed, in the immediate post-independence period, it was common for African governments to be proud of their fiscal and monetary prudence.

The original idea of having the government save was that, because of institutional weaknesses, the government would be more effective at mobilizing resources through the tax system and making these available for the private sector to invest productively (Heller 1954; Kaldor 1963; Meier 1970). This idea fell out of favor as governments began to preempt larger shares of the national income and invest on their own. In the process, governments became large dissavers. They absorbed private and foreign savings and because they generally failed to use these resources productively, the overall growth rate declined.

Because of the size of the debt of most African countries, improved government budget performance will contribute to, but will not resolve, the debt problem. Additional measures will be needed including the continuation of conditional debt write-downs⁴⁸ and other forms of relief. Nevertheless, a budget surplus will prevent the debt from increasing. It will also have the further

benefit of helping maintain macroeconomic stability so that growth can revive.

Improved Database: The situation often faced by African policy makers with respect to debt can be summarized in two assertions drawn from the business literature. "If you don't know where you are going, any road will take you there;" and "if you don't know where you are, there is no road out." These ideas apply with particular force when it comes to data on debt. Too often, African governments have borrowed abroad and failed to record the transactions in readily retrievable ways, or failed to maintain a system for adequately monitoring the debt. To rectify this situation, most African countries have received large amounts of technical assistance to rationalize their debt data. This was the case is The Gambia, where a major effort was needed to reconstruct the national debt data (Radelet, Gray and McNamara 1995).

Such support has been required so that countries can proceed to the Paris and London Clubs to reschedule and write-down their debts. This technical assistance has also helped many countries meet the conditions attached to IMF and other donor programs. Such conditions limit (and even prohibit) countries that are under a formal adjustment program from incurring additional arrears and increasing specific types of debt. In the absence of appropriate, timely, and comprehensive data, neither requirement can be adequately met. Just as important, however, is the fact that none of the conditions for effective macroeconomic management can be met while the government is unclear about the size of its debt stock and the time profile of its debt service payments.

Efficient Investment: As noted earlier, debt has often been seen as a "gap filler." Certainly much of the balance of payments support provided by the donor community (whether to cover debt service or to finance commodity imports) has been of this type. The general idea of African countries borrowing on the prospect of earning a return that would cover the costs of debt service and amortization was lost sight of a long time ago. Many bilateral donors have given up the notion that African countries have the capacity to borrow. All of their development assistance has been converted to grants. While grants may ultimately prove to be productive, that the marginal cost of these funds to the developing country is zero sets an exceedingly low performance standard. Similarly, credits from the World Bank and IMF with long grace periods and a nominal service charge (typically half a percent) do not apply any financial pressure for the resources to be used in high productivity areas.

With no requirement to be efficient, the generally poor results achieved with foreign aid across Africa should not be a surprise. Billions of dollars of foreign assistance have been provided to Africa. When seen against the background of Africa's growth and changes in its development indicators, much of this foreign assistance has been wasted. Even as net aid flows to Africa have increased, real income per capita has declined. Aid officials invariably argue that such comparisons ignore the counterfactual. Without aid, they assert, the circumstances across Africa may have been much worse with per capita income collapsing to an even greater degree. Those officials would also point out that aid serves different goals, and that promoting growth and development are only two. There is some validity to these points. Yet, all donors impose conditions on their support to ensure that it is used effectively. Recognizing this, however, only compounds the problem by showing donors' aid in an extremely unfavorable light. Despite massive net flows over an extended period, and conditions designed to ensure aid is used efficiently, many economies have continued to regress.

The implication is that aid, like the majority of resources available to African countries, has been wasted. The remedy, if there is to be one, is to enhance the productivity of all resources. One approach would be for the government to establish a "quasi-market" for grant funds. Only those agencies that can use the resources efficiently (as measured relative to the international opportunity cost of capital) would gain access to them. ⁵⁰ If no such activities exist, the country should use the funds to retire its foreign debt and/or build up its foreign reserves (thereby earning an international rate of return on them).

6. Mechanisms for Enhancing Macroeconomic Management

The ultimate success of all proposals to improve macroeconomic management hinges on the willingness of the government to exercise self-restraint. Without self-restraint, economic reform will be compromised irrespective of the actions of outside agencies or domestic pressure groups. A variety of mechanisms that might constrain government actions have been proposed (Collier 1991; Collier and Patillo 2000). The focus on issues of governance and democratization within the international community has been intended to improve transparency and accountability. These qualities, it is argued, will enhance the performance of the public sector (World Bank 1989). Success in this area might also lead to greater self-restraint. There remains, however, the problem of implementation. The mechanisms discussed below may foster prudence and self-restraint within government and the public sector.

a. Constructive Collaboration on Policy Within Government

Stabilization is never complete. However difficult the transition to a stable economy might be, new problems will always arise. The central bank and finance ministry will need to make additional adjustments as circumstances change although the new adjustments should not be as difficult and painful as those required for the initial transition to a market-oriented economy. Once reform is underway, the more quickly new problems are recognized and faced the less difficult dealing with them will become.

Effective policy requires early responses but the responses also need to be coordinated. If policy making is to be effective the central bank and finance ministry have to work together all the way from diagnosis to prescription and implementation.

This can be accomplished by the creation of a small team drawn from the two agencies and charged with the task of jointly analyzing current macroeconomic problems, and of exploring options for dealing with them. Technical staff cannot lead ministers and governors but they can clarify the implications of alternative proposals for action. Such a staff operation must, of course, be supported with up-to-date data and relevant analysis, a point already highlighted in the debt management section.

Specifically the policy review would focus on the adjustments to the budget and the financial program needed to keep the economy on a stable trajectory. The objective of the exercise would be to give the governor and minister of finance a clear view of the advantages and disadvantages of alternative monetary and fiscal actions. Ideally, the minister and governor can reach a unified

position to recommend to the president (or finance minister) and cabinet. However, even if they do not fully agree, an effective staff analysis can serve to highlight the likely outcomes of alternative policy proposals. Such an analysis requires that the central bank has timely and accurate data for macroeconomic analysis and that the staff have the analytic capacity to use those data effectively.

Senior officials in the ministry of finance and central bank should agree on the macroeconomic implications of the budget. They must recognize that budget deficits financed by central bank credit will almost certainly increase the inflation rate, that the use of commercial bank credit without additional bank reserves will raise interest rates, and that borrowing abroad creates future balance of payments problems. They must also agree that domestic real interest rates must be higher than money center rates by a realistic risk premium.

Furthermore, they need to recognize that however useful a fixed exchange rate anchor may appear, countries faced with fluctuating terms of trade will only intensify the economic damage if they attempt to maintain a fixed exchange rate. More important, under current international arrangements, a fixed exchange rate is not sustainable over the long term. The implication is that their exchange rates must float and that in the absence of large foreign reserves, the float can be managed only to a very limited degree.

A further point that should be recognized is that the central bank should not borrow abroad in an attempt to manipulate the exchange rate. To the extent that there is room for choice, the appropriate objective for exchange rate policy should be to assure that the real exchange rate helps to make the country's exports competitive in world markets. Appreciation of the real exchange rate is likely to be much more of a problem than depreciation.

Against that background the central bank's regular task will be to manage the *growth of reserve* money in order to manage the *growth of money supply* and to provide the growth in money supply required for a continuing *growth of output with reasonably stable prices*.

Central bank and the ministry of finance staff ought to reach some basic agreement about a number of issues relating to inflation. They need to agree on how important it is to achieve continued disinflation. In the absence of any other problems this will help focus attention on the near-term objective for the growth of nominal income. And they also need to agree on the implications of any choice of growth rate of real income for prospective movements of prices and output. That will be a continuing problem. There is no formula for resolving the relative importance of each. However, understanding the inflation process will repay the effort. That kind of discussion is relevant to a relatively placid world but policy makers must also be prepared for jolts. They must have a basic attitude toward the question of response to accommodating price increases from supply shocks or exchange rate depreciation.

Given those decisions the staff should produce at least every quarter a review of recent developments including:

- ♦ Import prices, exchange rate, balance of payments
- budget development and prospects, including links to official debt
- growth of money, credit developments, and interest rates

The staff group should then evaluate whether from the perspective of inflation and resource utilization nominal demand is likely to grow too quickly or too slowly and to assess the implications of demand growth for trade and exchange rates. They should also assess the relative merits of measures to speed up or slow down the growth of nominal income. The important aspect of the staff report is the presentation of the issues, their benefits and costs, and the risks implied by any policy choice.

Since many countries have agreements with the International Monetary Fund and World Bank regarding their macroeconomic policies, the policy formulation process is not as open-ended as the above discussion implies. Both the government and the central bank will be constrained in the type of policy options they can consider. Nonetheless, that need not prevent each country from developing its own macroeconomic program as a basis for negotiating with the international agencies.

b. Currency Boards⁵¹

Because the success of a fixed exchange rate regime depends on the political response to the measures required to sustain the fixed rate, there is much to be said for arrangements that remove political influences from areas that otherwise involve difficult policy choices. Once established, a currency board system does that by requiring that the local currency be backed 100 percent by the board's holdings of foreign exchange, and strictly limiting the board's ability to lend to the government or to commercial banks.

This means that the supply of domestic currency, always the largest component of reserve money, is not controlled by policy decisions of a central bank. Instead, it depends on the balance of payments and the willingness of the country's residents to exchange their foreign assets for local currency, whether as cash or deposits.

This puts an obvious brake on inflation, although the money multiplier still operates if commercial banks hold only fractional reserves in cash or claims against the currency board. In principle, the system is self-correcting since any expansion of deposit money increases the demand for imports, whereupon importers sell the board local currency in exchange for foreign currency. This leads to a contraction in the money supply. On the other hand an export boom or large inflow of foreign capital can lead to rapid expansion of the money supply, thus causing the potential for at least temporary inflation.

Notwithstanding this possibility (which can always be countered by a "special call" that sterilizes some of the inflow), the operations of a currency board severely limit inflation by removing money creation as an option for financing government expenditure. It reinforces this by removing decisions about the appropriate interest rate and credit availability from the realm of politics. Recently created currency boards in Eastern Europe and Latin America have been given quasi-constitutional charters, taking on the character of a contract between the board and the currency-holding public. The intention has been to ensure that this contract is not tampered with. In this regard, a properly functioning currency board system bears a close resemblance to the old gold coin standard.

If African governments were primarily concerned about price and exchange rate stability, a currency board would be a solution. Nonetheless, in some conditions the system might be seen as imposing too high a social cost. Under a currency board, a persistent adverse shift in the terms of trade necessarily generates a balance of payments deficit. This can be financed with foreign credit for a limited time only. Thereafter, the loss of reserves resulting from the deficit leads money supply to contract until domestic prices have fallen far enough to restore the trade balance. A currency board locks its country into that scenario until political pressure forces the abandonment of the system or a sharp devaluation. The latter, of course, undercuts the whole intention of the board which was to create the conditions whereby a fixed exchange rate could be maintained.

Most British colonies in Africa spent many years under regional currency boards, notably the West and East African Currency Boards (WACB and EACB). Upon gaining their independence, African governments abandoned these arrangements as soon as they could organize their own central banks. The currency boards issued local notes and coin in exchange for pounds sterling, to which they were linked one-to-one. (The latter was qualified by the fact that East Africa's legal currency unit was the shilling of which there were twenty to the pound.) The local currencies were thus backed 100 percent by foreign reserves, even if their convertibility relative to the dollar and other strong currencies was subject to controls that Britain maintained on the pound sterling.

For many years following the demise of the WACB and EACB the only extant currency board was that of Hong Kong. It has maintained a fixed exchange rate against the U.S. dollar since 1983. For many years Liberia ran a *de facto* currency board by using the U.S. dollar as its principal medium of exchange. Local coins represented fractions of a dollar. (This was not simply a matter of dollarization that has occurred in the weaker developing and transition economies. It was a conscious government policy to use the U.S. dollar.)

Practical interest in currency boards has revived, with countries as diverse as Argentina and two Baltic States, Estonia and Lithuania, establishing them. In Argentina's case, a currency board was adopted after decades in which other options failed. Thus far, it has been the only viable way to enforce fiscal discipline and impose hard budget constraints on the government, thereby giving credibility to a commitment to monetary and fiscal stabilization. Many observers view the improved growth performance that has followed the new monetary arrangements as cause and effect.

In retrospect, the poor performance of many African economies during the 1970s and 1980s and their continued fragility suggests that they might have done better with currency boards than they have with the central banks. They could hardly have done worse. Had they stayed the course with currency boards, they might have enjoyed greater macroeconomic stability and attracted more foreign investment, with correspondingly faster growth rates of exports and GDP.

At the same time, staying the course does not guarantee stability. In place of central bank credit, governments could have borrowed from both local and foreign financial institutions. Even with lower inflation, most governments would sooner or later have reached the limit of their capacity

to finance trade deficits. At that point they would either have had to accept severe demand restraint, as the franc zone countries did, or to abandon the system. Indeed, although different mechanisms are used, the currency board system has objectives that are similar to those of the franc zone, and as might be expected it has the same virtues and limitations.

c. An Independent Central Bank?⁵³

Central bank actions directly affect the cost and availability of credit and indirectly affect output, employment, price level, exchange rate, balance of payments, and stock of internal and external debt. These actions have an impact on the welfare of almost everyone, often with significant political repercussions. For their part, governments frequently adopt policies that cause serious financial dislocations. They often require banks to lend at below-market interest rates to specific sectors such as agriculture, and they tend to spend more than can be adequately funded by tax receipts and borrowing from the domestic non-bank public. Governments are slow to reverse counterproductive policies (such as food subsidies and tax holidays) particularly when those who benefit from the policies are their supporters. Furthermore, they typically resist exchange rate adjustment.

Given these conflicting pressures, it is hardly surprising that the relationship between the central bank and the government is often controversial. Supporters of each institution can always find fault with the other side. Politicians are ready to deflect blame if they can. Central bankers frequently suggest that their policies would be different if only the government would not interfere. This has led to the general recommendation that the central bank should be made independent of the government.

Central banks in many developed countries have achieved a degree of independence and are protected by legislation that makes it difficult for the government to dictate policy to them. In New Zealand, for instance, the Reserve Bank is fully autonomous and has the sole objective of controlling inflation (Evans *et al.* 1996; Walsh 1996). In the developing countries, however, few central banks have any substantial degree of independence. That is so even when the legislation appears to give them independence. For example, the Reserve Bank of Malawi has legislation modeled on the German Bundesbank but, in practice, its policies are largely directed at minimizing interest costs to the treasury.

Government Interference in the Financial System: A common feature in African countries is that governments intervene in the financial system. Sometimes the intervention is *ad hoc* in response to a pressing policy concern, e.g., interest rate ceilings to reduce the cost of borrowing for particular groups. Often, however, it comes from a desire to promote economic development.

Given the experience of the last three decades, is it likely that governments will continue to interfere as extensively? History now provides African policy makers with some useful lessons about how the government might proceed if it wishes to promote financial development.

First, bureaucrats (whether party appointees, central bank officials, or senior staff members of the ministry of finance) make poor commercial and/or development bankers. Second, the instincts of politicians with respect to financial and banking matters are almost invariably wrong. Third,

delaying action does not effectively deal with an economy's financial problems. Fourth, using financial institutions to redistribute wealth is inefficient and often counterproductive. And fifth, efforts to re-engage the private sector in the financial system are unsuccessful until private operators gain confidence that the government will no longer interfere.

Governments have typically appointed civil servants or political supporters to manage state-owned financial organizations. This has been a costly mistake. Few appointees have proven to be competent managers let alone skilled bankers.

There is little understanding among politicians of the difference between real capital and financial capital. The former can be transformed into the latter whenever there is a market; the latter can only be transformed into the former when there is additional real savings.⁵⁴

Politicians have also been poorly advised regarding the types of policies needed to achieve and sustain financial stability. Fixed interest and exchange rates provide stability in two nominal parameters but usually at the expense of instability in other variables such as monetary growth and external debt. The franc zone countries had a fixed exchange rate from 1948 to 1994. This did not prevent the region from experiencing major fluctuations in each country's real exchange rate, accumulating foreign debt rapidly, and from undergoing general economic decline (Bhattia 1985; Devarajan and de Melo, 1991).

Postponing financial reform in the hope that the situation will correct itself has been a common mistake across Africa. This reflects a general lack of appreciation by policy makers of the speed with which financial markets adjust. Failure to act generates distortions elsewhere in the economy and undermines confidence. Postponing action does nothing to address the fundamental financial problems yet it typically increases significantly the ultimate cost of reforming the financial system.

Using the financial system to redistribute wealth in ways that enhance development has a poor record in Africa (and elsewhere in the developing world). For example, the common justification for cheap credit has been that members of the particular group are too poor to pay high rates of interest (Adams 1977). Such programs are inefficient (i.e. they waste resources), ineffective (i.e. they do not achieve their intended purpose), and inequitable (i.e. they worsen the distribution of income and wealth). The lesson is that the financial system is not the mechanism for subsidizing specific activities (through cheap loans) or making grants (through the non-collection of loans). If governments wish to support specific groups or activities while creating conditions conducive to financial development, a more satisfactory, transparent, and ultimately cheaper solution is a subsidy paid through the budget (White 1993; von Pischke 1994).

Finally, there is widespread evidence that government interference directly discourages private participation in the financial system. Few private entrepreneurs have been willing to invest in financial organizations as long as governments maintain restrictions on financial markets. Indeed, when they get the chance most firms and individuals withdraw their capital from the sector.

While government interference raises a number of questions, there has also been considerable debate about the impact on the economy of central bank actions. The roles assumed by central banks have emerged over a long period. Many of their functions have responded to pressures and

controversies. Historically, the first central banks were founded to finance the government. Over time concern shifted to arrangements for currency issue to meet the needs of trade while minimizing the danger of inflation fueled by excessive currency issue (Sayers 1957; Goodhart 1988; Greenspan 1996). At other times, central banks have been concerned with maintaining currency convertibility, and stabilizing prices and exchange rates. These tasks have typically involved compromises that left no one satisfied. The central bank would be criticized for being too restrictive and too dedicated to the control of inflation, or for giving way to political pressures to accommodate government deficits or other inflationary pressures.⁵⁵

Over recent years, the criticisms have come from two sources. Some observers want to integrate central bank actions with the government's macroeconomic policy thereby making the bank accountable to the legislature. By contrast, others feel that central banks have allowed other macroeconomic policy concerns to undermine their obligation to maintain a stable currency.

In practice, there are many arrangements (Fair 1979). At one extreme, some central banks are part of the government and merely carry out government policy. At the other extreme, there are central banks whose governors and managing boards serve for long terms and cannot be removed readily.

Formal arrangements, however, are not the whole story. The ability of the central bank to pursue any policy ultimately depends on public support for the bank and its policy. This in turn is related to its staff's reputation for competence and good judgment. If the bank lacks strong public support, the government can always change the legislation that applies to the central bank. The Bundesbank in Germany is famous for its independence from the government, but that independence rests on popular support for its anti-inflation policy.

Form vs. Substance: The formal relations between the central bank and the government are important primarily because they influence the difficulty faced by any government that might seek to override the policy of the central bank.

In practice, the independence of a central bank is a matter of degree, of how far the bank can go in raising interest rates or restricting the growth of money and credit. It is also a matter of how long restraint can be maintained, how often it can be applied, and (if need be) how often it can be reapplied. The degrees of freedom enjoyed by the central bank at any one time depend in part on the powers granted to it by legislation and by the security of tenure of its management. Its freedom to act rests on the depth of political support for the bank as an institution. That support will depend in part on the bank's reputation for competence and objectivity. Finally, but most important, the leeway available to a central bank at any time hinges on the political balance between those who benefit and those who bear the costs of any change in policy (Kane 1982; Blinder 1998).

For instance, measures that restrict demand growth in order to reduce inflation will be opposed by trade unions and others concerned about unemployment. The measures will be supported by those who are not directly affected by rising interest rates, or by credit rationing. Support for measures to stabilize prices comes from those whose incomes are fixed, from the financial community and from those concerned with exchange rate stability.

Responses to central bank policy are not symmetrical. There is much more popular complaint about

restrictive actions than about expansive ones. Whatever the long-term consequences, the immediate effects of expansive actions usually benefit far more people than they hurt.

Testing the Limits of Independence: As a general rule the independence of a central bank is most likely to be tested when its pursuit of policy objectives conflicts with the economic objectives of the government. Conflict may arise when the bank's objectives for price and exchange rate stability require credit restraint because of:

- increasing budget deficits; or
- reduced export earnings or a decline in official transfers; or
- inflationary pressures from rising import prices or poor harvests.

The central bank management may believe that an increase in nominal demand growth to finance government spending will start a spiral of rising prices and wages and exchange rate depreciation that will not increase real output but will be difficult to reverse. If the bank maintains a monetary program consistent with price stability, the government will find that it must either accept the interest rate increases that crowd out private expenditure, or give up its expansion program.

When faced with supply side pressures on prices, central bank managers may also believe that early and vigorous action will check price increases before a wage price spiral gets underway. They may also believe that such action will maintain confidence in the country's commitment to a stable exchange rate. However, whether exercised through rising interest rates or rationing, credit restraint is always painful. In the second and third situation listed above a period of reduction in domestic consumption and investment and usually a considerable amount of unemployment as well will occur if the central bank's objectives for price stability are to be achieved.

If the central bank were to pursue its objectives without regard to their political implications, the government may be forced to use (or threaten to use) any policy levers available. It could, for example, inform the governor and the bank's board members that their reappointment was contingent on a change of policy. It could instigate legislative hearings on the policy or arrange for legislation to change the central bank's charter. The outcome of such maneuvers would depend on how strongly the public supported the bank's approach relative to its support for the government's policy objectives. The government will find that open conflict with the central bank has political consequences as well.

The central bank will have to compromise, however, if it has little support as an institution and finds the public unwilling to bear the costs of reducing inflation. In fact, central bank managers typically consider the political implications of their proposed policies. They tend to proceed gradually and limit their restrictive actions when there is too much opposition. They may attempt to reach a compromise over policy before acting.

Indeed, in most cases, that happens when substantial conflict exists between the policy which a central bank would pursue if it were left to itself and the one desired by the government. The United States Federal Reserve is generally regarded as one of the most independent central banks in the world yet it has often compromised to avoid an all-out conflict with the president and congress. Moreover, the German Bundesbank, also regarded as highly independent, infrequently contradicts

the government even though it has always had strong popular support.

Legislation that ensures long terms for governors and directors and provides budgetary autonomy for the central bank strengthens the position of the bank in reaching a compromise. Moreover, it helps the bank operate independently when it needs to make gradual changes in interest rates. The government may also tolerate actions by the central bank that it would never take on its own. It seems unlikely, for instance, that any American government would have undertaken the policy pursued by the Federal Reserve in 1979-82, but two administrations watched it unfold without attempting to intervene. Yet, it must also be said that the Federal Reserve could not take those kinds of actions (raising interest rates, restricting monetary growth, and creating widespread unemployment) very often. The political tolerance for restrictive policy is limited.

There is some benefit from changing the enabling legislation if it helps improve the central bank's negotiating position. The size of the benefit will depend on the basic political situation. In countries where there is no large and influential financial community and where one party regularly controls the legislature, a central bank is unlikely to be able to achieve any substantial independence on the basis of its legal position. The government will usually be able to keep the bank in line whenever it wishes. In those circumstances, the central bank's management will be more effective working from within the councils of government than by attempting to assert its independence.

Although we have focused on the central bank's role in policy formulation, its reputation will depend on how it carries out other functions such as financial supervision, the management of the government's debt operations, and the conduct of exchange rate policy. In this respect, the central bank will have to ensure that its staff continues to be properly trained. Moreover, senior management should not only participate in policy formulation but should take every opportunity to bring other professional staff into the process.

Professional competence and effective performance are what provide the central bank with a key role in economic policy. Legal formalities do not.

d. Restoring Confidence in the Financial System⁵⁶

As a means of improving monetary (and ultimately macroeconomic) management, it will be necessary for the government and the central bank to make a special effort to rebuild public confidence in the financial system. Two aspects require special attention. The first relates to the value of locally denominated financial assets. The second is the ability of the monetary authorities to assure the solvency and liquidity of the financial system.

The importance of confidence to the operation of any financial system should never be underestimated (Kindleberger 1987; Dixit and Nablehuff 1989; Goodhart 1989; Mayer, Duesenberry and Aliber 1990; Humpage 1990; Gillis *et al.* 1996). Indeed, since the value of financial instruments (including money) depends on their acceptability rather than their intrinsic properties, ⁵⁷ confidence is a precondition for success of any modern financial system. ⁵⁸

High and rising inflation, exchange rate depreciation, negative real interest rates, doubts about the solvency of key financial organizations, and the poor quality, high cost, and limited range of financial services have combined to erode public confidence in both the financial instruments and the financial organizations in most African countries. Indeed, many local financial operators view the central bank itself with skepticism and distrust. The monetary policies of the last two decades have left deep scars and few among the public believe that the respective central banks have the ability to effectively manage the financial system. The most obvious examples of the lack of confidence have been widespread financial disintermediation, the use of alternative (informal) credit channels, currency substitution, and persistence of parallel foreign exchange markets.

The chronic lack of faith which African asset holders have displayed tends to amplify the effects of any financial shocks. When there are threats of inflation or balance of payments difficulties the public may fear a tightening of exchange controls and a return to credit rationing or an increase in financial insolvency. These uncertainties compound the risks involved in holding local currency assets.

Vulnerability to financial crises will be a feature of financial systems across Africa until their governments reestablish a record of stability. Should a sudden loss of confidence in the system lead to capital flight or to a shift of resources out of the banking system, the resulting exchange rate depreciation and inflation will require the central bank to restrict credit. Under a system of credit ceilings, the central bank would normally respond by reducing the limits on bank lending. With the indirect control of credit, the central bank has to withdraw reserve money. This would raise interest rates thereby reducing the demand for loans. To have the desired effect, the increase in nominal interest rates at times may need to be large. The associated risks of economic and political disruptions may tempt the central bank to reestablish credit rationing and exchange control. This has already happened in a number of countries in East Asia. The problem is that, if the central bank were to re-impose controls after having committed itself to move towards indirect monetary control, its intentions and commitment to consistent policies would be seriously questioned.⁵⁹

To avoid such a situation, the central bank needs close cooperation and support from the government, particularly the ministry of finance. There has to be a genuine willingness on the part of the government to accept the interest rate consequences of restricting credit. In the absence of government support of this nature, the expanded reliance on market mechanisms for monetary control would expose the central bank to severe criticism should events go awry.

As a means of insulating the central bank from such criticism, there has been renewed interest in the question of central bank independence, a topic covered earlier. As we noted there, the point is not independence as such but the need for the central bank to engage in broader consultation and cooperation with the government based on the mutual recognition of the two institution's respective constituencies and responsibilities.

Allowing their central bank to take a more constructive role in macroeconomic management should be a major objective of all African governments. Over the short-term, it is difficult to judge the extent to which this would enhance confidence in the local financial system. Much would depend on the capacity of senior central bank staff and how willing the largest asset holders are to believe that genuine reforms are underway. But, over the longer term, the

maintenance of a central bank subservient to the government will be counterproductive.

After years of financial disruption and numerous failed efforts at reform, central bank (and government) actions are going to count far more than words. Indeed, the announcement of yet another attempt at reform may hardly be noticed. To begin the process of restoring confidence, the central bank should focus on achieving a reputation for sound finance. Above all, this will require policy actions to reestablish and maintain macroeconomic stability (Drake 1980; Fry 1988; Johnston and Brekk 1989; Ruding 1990; Jenkins 1996; Chang 1998; Mishkin 2000).

Once some progress towards macroeconomic stability is evident, all financial organizations will face an operational setting that is more conducive for expanding their activities. The general public, however, will need to be convinced that these organizations are well managed. Stabilization, therefore, has to be supported by efforts to improve the supervision of the financial system.

e. Dealing with Shocks

The experience of African and other countries indicates that many difficulties in managing the macro economy can be traced to two sources. The first is the practice of using central bank credit to finance large public sector borrowing requirements. The second is the willingness of central banks to accommodate inflationary pressures from supply shocks and depreciation of the exchange rate. If those practices can be held in check, African countries can have stable prices and largely avoid the process of disinflation with its painful side effects.

There have been, however, the additional shocks emerging from international markets. African governments need to recognize and respond to the degree to which they are integrated with world financial markets. Although there were few resources withdrawn from Africa during the turmoil in Asian markets and Russia in 1997 and 1998, the outcome of those disruptions affected Africa's potential for growth and development.

In response to the problems created by the financial turbulence during 1997 and 1998, a number of schemes have been proposed to control short-term capital movements. African governments should carefully consider the implications of attempting to implement such controls. Short-term capital movements are essential to exchange markets when there is no central bank intervention. Transient variations in factors affecting trade as well as changes in the flow of grants and loans are constantly upsetting the balance of payments. Most of the elements in the balance of payments are unresponsive to exchange rate movements in the short run. When there is a deficit in the balance of payments, short-term capital to cover the shortfall must be attracted by some combination of higher interest rates and exchange rate depreciation.

If the central bank maintains a stable real interest rate, the burden of adjustment must fall on the exchange rate. The exchange depreciation that initially serves to induce short-term capital flows will later on serve to stimulate exports and reduce imports. When central banks lack the reserves to intervene effectively in exchange markets "stabilizing speculation" of the kind just described is necessary to limit the volatility of exchange rates.

Yet, not all short-term capital movements are stabilizing. At times short-term capital may be attracted to a developing country by relatively high interest rates and the belief that a fixed exchange rate will be maintained. When banks receiving capital flows expand credit, they increase domestic demand. This will result in upward pressure on prices and a decline in net exports. Those events, in turn, may endanger the stability of the exchange rate and generate a costly capital outflow. Speculative swings of that sort can be limited by appropriate bank supervision. ⁶⁰ They are much less likely to occur when the exchange rate is floating.

Over the last quarter century there have been two bursts of international capital movements, each followed by a collapse of confidence in the recipient countries and with huge losses to both borrowers and lenders. In the 1970's, capital flows surged as funds were recycled from the newly rich oil exporters to developing countries experiencing the adverse terms-of-trade shock. In that episode the countries that made the necessary macroeconomic adjustment to the oil shock borrowed relatively little and were not generally disrupted when the lending bubble ended in 1982. Other countries that failed to adjust and had borrowed heavily stagnated for years in spite of considerable assistance from international agencies. In that episode the Asian countries adjusted most effectively, borrowed the least and fared the best of all developing countries.

During the last decade, financial organizations in Europe, Japan, and the United States, impressed with the rapid growth of the East Asian countries and the recovery of Latin American countries, began expanding their loans to both regions. The increased flow of capital to developing countries was generally viewed with enthusiasm by governments and international agencies and by the business communities in both lending and borrowing countries. There were, of course, some complaints about the effects of "globalization" on local industries in recipient countries and about the labor practices of some direct investors in labor-intensive industries. Yet, few doubts were expressed about the effects of capital flows on the macroeconomic stability of the recipient countries.

The events since mid-1997 have led to widespread demands for review of policies affecting international capital movements. Criticisms of the IMF's management of the crisis in Asia have been even more intense. ⁶¹ In the following sections we first review some aspects of the benefits and risks associated with different kinds of capital movements and then examine issues related to stabilization and recovery policies.

The value of capital movements: In most theoretical models of development, capital accumulation plays a central role. Private and public savings and investment are regarded as instrumental in promoting development. The record of performance of the high saving, high investment economies of East Asia fully supports the theoretical argument. Most models also indicate that infusions of foreign capital will be beneficial to poor countries. There are, however, some complications.

Foreign direct investment is often considered to be most valuable because it provides capital and transfers management skills and knowledge through learning-by-doing. In practice, direct investment is often criticized for exploiting local natural resources and repatriating excessive profits, as well as for poor labor relations.

Long-term bond finance from foreign sources has been used in many countries for over one hundred and fifty years, mainly for infrastructure. There have, of course, been some notable defaults by borrowers in the United States and in Latin America. At least in the case of the United States, the defaults arose from the domestic difficulties of the projects rather than from problems of availability or the price of foreign exchange. By contrast, defaults during the recent financial crisis have largely resulted from sharp movements in exchange rates. Nonetheless, changes in exchange rates may cause some defaults on interest payments, but they cannot cause mass withdrawals of foreign credits like those experienced by short-term borrowers. That was the result of panic.

The risk-return profile for investors and for recipient countries would be improved by greater reliance on long-term portfolio financing with a correspondingly lower reliance on the use of short-term funds. That could be accomplished by more effective supervision of banks and by active use of special bank reserves against foreign exchange liabilities while at the same time providing adequate information on national commitments for foreign currency debt service. The recent experience of Asian countries as well as that gained in earlier episodes shows the need for better monitoring and supervision of the foreign exchange liabilities of banks in developing countries. As a result of earlier debt crises, the Bank for International Settlements and the larger central banks began devising supervisory standards for bank exposure to foreign exchange risk (BIS 1988; Stevens 2000). These standards, currently being reviewed, need to be more widely adopted. The need is to take account not only of the direct risk of loss on account of uncovered foreign currency liabilities, but also of the indirect risks on loans denominated in foreign currency to customers who do not have foreign exchange income (FNBKC 1997).

Any standards adopted should also take account of commercial bank exposure to losses due to exchange rate depreciation. As such, they should reflect the national factors determining the likelihood of exchange rate depreciation. Those factors would, of course, include the aggregate foreign debt position of the country in question. Some of this analysis is already available from rating agencies that serve investors in the OECD. That information, however, does not appear to influence bank supervisors in borrowing countries.

Banks can be required to hold special reserves at the central bank against foreign exchange liabilities. The reserve requirement can be varied to reflect changes in the national exposure to the risks arising from excessive foreign debt.

Yet, since crises in servicing foreign debt have been occurring for a very long time, it is likely that they will continue to occur. We should therefore address the question of how to minimize the damage they cause.

What should be done when lenders lose confidence in a country with large amounts of short-term foreign debt? Lenders may stop making new loans and/or refuse to roll over existing short-term loans. If there were an initial current account deficit, the cessation of lending will necessarily lead to a sharp depreciation of the exchange rate. This will frequently make it impossible for previously solvent borrowers to meet their foreign currency obligations. Their defaults will induce other lenders to attempt to withdraw their funds. If nothing is done the price of foreign currency will soar. Indeed, it will rise until some debtors stop trying to pay in foreign currency

and speculators at last are convinced that no further price rise can be sustained. Left to themselves, these market responses can produce (and as the Asian example shows *did* produce) disastrous consequences – widespread business failures, lost production due to the unavailability of imported inputs, and rapidly rising prices together with declining demand. When this occurs, some intervention will be needed to either restart the system or to ensure that it does not continue to decline precipitously.

To stop the downward spiral and to begin the recovery process, the government must first reestablish confidence by displaying its willingness to make necessary fiscal adjustments and to follow a rational monetary policy. Second, the exchange rate has to be stabilized. Third, the government needs to show that it is able to take the lead in arranging for orderly rescheduling of foreign debts both public and private.

In framing these activities, the government needs to recognize that its policies will have to shift the balance of payments current account deficit to a surplus sufficient to cover whatever change in net resource transfers may emerge from negotiations over debt service and foreign aid. The government must also make provision for servicing additional debt which it may create in the process of re-capitalizing domestic banks and settling depositors' claims. However, in view of the adverse effects of the financial crash it will not usually be necessary for the government to run a surplus or even balance its budget in the immediate aftermath of the crisis. The budget and monetary policy taken together should be directed at providing a level of demand that does not re-ignite inflation but is not intended to unwind immediately the inflationary pressure from devaluation.

Efforts to stabilize the exchange rate should be implemented as soon as a macroeconomic program can be adopted. In choosing its exchange rate policy it must be taken for granted that a substantial depreciation from the pre-crisis exchange rate will occur. However, it should not be necessary to allow the currency's value to collapse. When international funds are available it may be possible to stabilize a currency by market intervention, coupled with confidence building measures. But once panic has set in, it will be difficult for market intervention to stem the tide of selling. Indeed, intervention will often aggravate the collapse. What should be avoided is any premature attempt to declare a new currency value with resort to exchange controls even if these are only meant to be temporary. In view of the history of past interventions across Africa, these are more likely to further undermine confidence. Exchange rate stability will be more readily achieved through the use of emergency assistance from the international community in the context of restrictive domestic fiscal and monetary policies. At the height of a crisis, some action to halt trading in the same spirit as the "circuit breakers" used in the major stock markets can be useful. These, of course, would be most useful if they followed a protocol supported by international agencies.

The third step in a stabilization and recovery program is an orderly negotiation to restructure the foreign debt. Once that step is completed it should be possible to move toward a real exchange rate which will in time produce a balance on goods and non-factor services consistent with a realistic debt service burden. A viable debt service program must be consistent with the capacity of the country to earn foreign exchange by net exports.

In contemplating these actions, the authorities need to consider two points. First, it takes time for changes in real exchange rates to produce their full effect on exports and imports. Settlement of debts should take account of that lag. It is undesirable to over-depreciate a currency in order to speed up debt collection. It is equally undesirable to force an excessive amount of import compression through income reduction.

Second, we cannot really know the outcome of any program to respond to a crisis even if all assumed conditions materialize and much less so since they will not. Debt settlement programs ought to have some arrangement for them to be adjusted in the light of experience.

7. Concluding Observations

The task of restarting and sustaining growth and development in Africa requires a major, sustained improvement in macroeconomic management. In this paper, we have adopted a comprehensive approach to macroeconomic management. It embraces monetary and fiscal policies, exchange rate policies, and debt management. Taking this perspective requires us to consider all of the major inter-connections that arise in the formulation and implementation of macroeconomic policy. This imposes consistency. It also forces policy makers to take note of the spillover effects of their actions in all of these areas.

Our discussion has emphasized the main challenges facing macroeconomic management. Beginning with the need for internal and external balance as a means of stabilizing the economy and promoting structural adjustment, we then move to details of fiscal and monetary policy, financial reform, and debt management.

At its most fundamental level, successful macroeconomic management depends on government self-restraint. No entity besides the government can reduce the budget deficit, allocate public expenditure efficiently, ensure that the growth of the money supply is consistent with price stability, and ensure that external debt remains at levels that can be serviced. All of these require the government to exercise prudence.

Structural adjustment programs provide the opportunity for a country to make the transition from macroeconomic imbalance and its attendant disruption and instability to a situation of macroeconomic balance and stability. The challenge, however, is to institutionalize the processes through which stability can be maintained. We have suggested several mechanisms through which this might be achieved and examined their implications. All of them require improved coordination among senior policy makers and their staffs, especially the ministry of finance and the central bank.

African governments have made considerable progress in their understanding of the importance of improved macroeconomic management. There are now many examples of comprehensive changes in macroeconomic policies. These are having positive effects on economic performance. After many years of disruption, this is a welcome change. Yet, the main challenge remains how to ensure that improved macroeconomic management becomes the foundation of efforts by African governments to promote and sustain high rates of growth and development.

Annex: The Franc Zone Arrangement⁶³

In comparing the experience of African countries, a central question is whether the franc zone (FZ) arrangement has been sufficiently beneficial to members of the monetary union to make it worth replicating elsewhere in the continent. With the 1994 exchange rate realignment it can be argued that the FZ countries have in fact switched from a fixed exchange rate to an adjustable peg. Yet, the longer the new peg lasts, the more it will converge on a fixed rate regime.

Until shortly before the 1994 realignment, the most prominent defenders of fixed exchange rates in Africa were those involved in supporting the African financial community's franc (CFAF)/French franc (FF) parity that lasted 45 years. ⁶⁴ In many ways the FZ experience can be regarded as a test of the fixed rate regime under optimum circumstances. Multilateral institutions in two groups of countries – seven in West Africa, six in Central Africa – mobilized far stronger discipline over individual members' demand management than almost all African central banks or ministries of finance ever succeeded in exercising over their own governments. Moreover, standing behind the arrangement was France, with its implicit veto power over any degree of monetary expansion that would raise above acceptable levels the deficits of the FZ central banks in their operations accounts with the French Treasury.

The situation fits neatly into a game-theoretic framework. In effect, the Government of France determines unilaterally an overall ceiling on FZ credit creation in conjunction with its targets for macroeconomic management of the French economy. In simplistic terms, this constraint establishes the framework for a zero-sum game. The representatives of each African member country, convening at one of the two central banks, understand that increasing the credit allocated to one member government reduces by that amount the credit allocated to other governments taken together.

When they meet under the auspices of the Central Bank of West African States (BCEAO) or Bank for Central African States (BEAC), there is broad understanding of this constraint. Accordingly, the heads of state, who convene twice a year, the ministers of finance, and their subordinates in committees at sub-ministerial level collectively impose and accept a degree of mutual fiscal and, hence, monetary discipline. The experience elsewhere in Africa shows that such discipline would have been highly unlikely if each member of the FZ had operated its own central bank.

Over the longer term, this framework brought substantially lower inflation rates in FZ countries than in the majority of non-FZ Africa. In fact, during the six years 1986-1992, it forced Senegal's measured consumer price index (CPI) down by 7.5 points (*International Finance Statistics* December 2000, pp.718-719).

Up to the mid-1980s, the FZ's average growth performance was sufficiently superior to that of the rest of Africa to make replication of the arrangement worth debating (Devarajan and de Melo 1991). In addition to controlling inflation, the system enabled the zone to avoid the worst aspects of exchange controls with the attendant uncertainties and costs they have imposed on producers elsewhere in Africa. While this advantage did not raise investment, exports, or job creation markedly, it prevented a major collapse in these areas as had occurred in many other African

countries.

However, in the latter part of the 1980s the growth advantage disappeared as it became more than obvious that the CFA franc was seriously overvalued. The resulting lack of competitiveness of the FZ economies was no less a damper on investment and job creation than inflation and exchange control elsewhere in Africa. Senegal's GDP growth averaged 1.3 percent per annum during 1989-91; the FZ's largest economy, Côte d'Ivoire, experienced declining total (not merely per capita) GDP for five consecutive years starting in 1987. The fact that it took the zone authorities, including the French Treasury, more than a decade to overcome their fixation with an out-dated exchange rate regime and to deal constructively with the situation raises serious questions about the relative advantages of the FZ system.

Instead of making the preservation of parity a goal in itself and imposing drastic deflationary measures to achieve it, FZ money managers and their French colleagues might have more profitably conducted a benefit-cost analysis comparing the net present value of a policy of deflation with that of alternative policies. Action taken at an earlier stage would have required a much smaller devaluation than the 50 percent that occurred in early 1994. If combined with the strengthening of BCEAO/BEAC instruments of monetary restraint, particularly the imposition of (internal and external) credit limits on public authorities, growth might have resumed with much less pressure on prices than the 30-50 percent increase that FZ members have experienced since January 1994.

The same observations apply to management of the "new" FCFA/FF parity. As before, France's guarantee of convertibility has enabled the two FZ central banks to defend parity in the short run against the kinds of flows that have caused some countries' floating exchange rates to gyrate. At the same time there is the danger that FZ authorities will treat all capital outflow as movement in search of short-term advantage, and flows responding to a loss of underlying competitiveness will be too long ignored.

One proposal is to adopt an intermediate arrangement (Duesenberry and Gray 1996). This would be decidedly preferable to the announcement that the new 100:1 exchange rate will be maintained indefinitely. There is nothing inconsistent in France maintaining a ceiling on its Treasury's FZ operations account, and the BCEAO and BEAC continuing to limit a member's outstanding credit to 20 percent of last year's revenue, while the CFAF/FF exchange rate (or the CFAF/euro) is allowed to move in response to market signals. This would protect the zone's international competitiveness while preserving arrangements for containing inflation and leaving trade unencumbered by quantitative and other restrictions.

To date, there is little indication that the FZ authorities are willing to consider such an option. They seem to consider that the risk market participants would attach to a variable exchange rate, along with the pressures to which it might be subject, pose a greater threat to economic expansion than the possibility that a fixed exchange rate might once again trap the zone in an uncompetitive position.

Notwithstanding this view, the renewed adherence to the fixed rate prevents the franc zone system from realizing its full economic potential. Before they find themselves lodged in the same

predicament as in the 1980s, it would be useful if the FZ authorities can develop:

- decision rules by which market signals and cost comparisons can be translated into gradual parity changes, and
- institutions qualified to do the analysis and ultimately implement changes without requiring the unanimous consent of all participating heads of state.

The foregoing discussion suggests that a multilateral framework similar to the franc zone could offer advantages in the African context, provided that it is not regarded as synonymous with a fixed exchange rate regime. However, before considering this as a policy option for non-FZ countries one must examine the political preconditions for such an arrangement. It is difficult to imagine any ex-colonial power other than France – notably the United Kingdom, with Portugal as an even less likely candidate – establishing an open line of credit for a set of African countries and keeping control over the growth of credit through a multinational central bank with the *metropole* given a veto power.

Apart from the multilateral framework one could envisage an arrangement between a *metropole* and a single African country. In that case the bargaining would be on a bilateral basis (setting aside the likely continued role of the IMF). Indeed, France has long dealt in this manner with Comoros and continues to do so. France and Mali operated a similar arrangement for 17 years between Mali's abandonment of its experiment with an inconvertible currency and its readmission to the West African Monetary Union in 1984.

Politically, however, such a bilateral arrangement gives a greater appearance of neo-colonialism and the renunciation of sovereignty than does a multinational set-up such as the West African Monetary Union (WAMU) or the Monetary Union of Central African States (MUCAS). ⁶⁵ In these arrangements, France is merely one of six or seven members and its veto power is rarely acknowledged publicly. Even as regards such a framework, only one African country Equatorial Guinea that gained independence outside the franc zone has voluntarily sacrificed its sovereignty by handing over to a multilateral central bank (the BEAC) the power to limit its domestic borrowing. It was accepted into MUCAS in 1984.

With continued economic reform throughout Africa, it may be possible at some future point for groups of neighboring African countries to achieve a level of macroeconomic management permitting the degree of policy coordination required to envisage discussions regarding an arrangement similar to the European Monetary Union. In other words, forming a currency union with no *metropole* holding a veto power. At the moment, only the Southern African Customs Union has passed the necessary intermediate stages.⁶⁶

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Endnotes

¹ Goldstein and Turner (1996) provide evidence showing that a majority of instances of macroeconomic instability in developing countries that resulted in financial crises originated with terms of trade shocks.

² A major source of confusion among African policy makers has been the distinction between finance and real capital. What has not been widely understood is that the expansion of finance has not been a constraint on growth. The basic constraint has been the inadequate supply of real resources due to low productivity growth, inefficient organization, lack of innovation, distance from major markets, and the (generally) limited expansion of human and physical capital (Easterly and Levine 1995; Sachs and Warner 1997; Fischer, Hernández-Catá and Khan 1998). Indeed, the inflation experienced by Africa over the last three decades demonstrates that there has been too much finance and too little real capital (Duesenberry and McPherson 1992).

³ The literature on credibility of monetary and other macroeconomic policy is large. Examples include Barro (1986), Goodhart (1989, 1994), and Persson and Tabellini (1990), and Chang (1998). The issue of policy reversal has gained increasing attention as well (Krueger 1993; Sahn 1994; van de Walle 1994; Snowdon and Vane 1997; and Easterly 1999). Indeed, the very basis of the study of which this chapter is a part emerges from the problem of policy reversals. Ironically, the developed countries have benefited enormously by sustaining their adjustment programs (OECD 1994, 1998).

⁴ From the end of WWII until the mid-1970s, most African countries saved and invested significantly larger shares of their national income. For example, in Zambia savings and investment regularly exceeded 30 percent of GDP over that period (McPherson 1980).

⁵ Squire (1989) provides a detailed overview of the types of adjustments that are made in practical project evaluation exercises. Meier (1995, pp.558-561) has additional references. It is a matter of taste whether this is seen as fakery or pragmatic approximation. The outcome, however, is that these methods allow considerable leeway for deriving predetermined results.

⁶ Such arrangements would have to involve some mechanism for deflating the overly optimistic expectations associated with donor projects. Often one of the starkest contrasts in developing economies is the return expected from projects when they are planned and the return realized when they are executed. The World Bank now has a long history of post-project evaluation. For many African countries, actual returns are often orders of magnitude less than anticipated (World Bank 1996; Collier and Gunning 1999).

⁷ This is a well-established empirical fact (Johnson 1962; Friedman 1968; Goodhart 1989). The variability of the lags was a key justification used by Friedman for advocating his "money growth rule" that became the essence of monetarism. As noted in the text, the close relation between money and economic activity began to break down (Goldfeld 1973). Central bankers shifted the emphasis from money to interest rates. Since the problem of long and variable lags persists, they have attempted (through a variety of modeling techniques) to anticipate inflationary and deflationary pressures so that they might take pre-emptive action. This is an art, not a science, and central banks are not immune from mistakes. The chairman of the US Federal Reserve recognized the "irrational exuberance" that had overtaken US asset markets (Greenspan 1996). Since then, it has been using interest rates in a balancing act – to sustain the expansion without allowing inflation to accelerate.

⁸ Bank managers were called in and effectively told to bid higher prices for Treasury Bills (personal communication of McPherson with commercial bank officials, Lusaka, January 1998). Nominal interest rates fell sharply in Zambia during the second and third quarters of 1997. The fall was so sharp that real interest rates turned negative and remained that way from Q4 1997 through Q2 of 1998 (Ministry of Finance and Economic Development, Lusaka *Macroeconomic Indicators* December 1998, Table 2.6).

⁹ Over the period July 1997 to June 1998, for example inflation was 24.2 percent and the exchange rate depreciated by 46.1 percent (*Macroeconomic Indicators* December 1998, Tables 1.1 and 1.3).

¹⁰ Dorfman (1969) has a user-friendly explanation of the basic concepts involved.

¹¹ In this context, of the "J" curve refers to the deterioration in the balance of payments following devaluation. Because of lagged responses, the rising cost of imports outweighs the rising earnings from exports. Over time, the effect reverses as the demand for imports declines (due to their higher local prices) and earnings from exports rise (as exporters increase their supply).

¹² The Compensating Financing Facility introduced by the IMF in the mid-1970s and the STABEX fund initiated by the European Economic Community (as it was then) under the Lomé Convention have elements of this idea. Over time, however, these funds have been used for a variety of objectives, political and economic. As yet, a shock-driven aid facility has not been created. Most donors tend to respond on an "as needed" basis. This has proven to be cumbersome and not fully responsive to the needs of countries that experience negative shocks. Of course, such a mechanism can always be criticized on moral hazard grounds. If support were certain, developing countries would be less diligent in building up reserves and avoiding policies that created excessive downside risk.

¹³ Numerous developed countries, including the United States, the U.K, and Australia, had major showdowns with their unions over wage determination. Developing countries are finding that in order to achieve some control over key elements of the budget such disputes are inevitable. Governments that have capitulated, e.g., as in France, have had little success in rationalizing their public sector expenditure. Zambia made a major effort to reduce the growth of public sector salaries during 1993 and 1994. The effort waned from 1995 onward. As a result, the government wage bill and the deficit and subsequently inflation have been difficult to control.

¹⁴ The material presented here draws freely on Duesenberry *et al.* (1996). There are numerous surveys of exchange rate performance in the literature and many proposals for reform. A selection includes Quirk (1987, 1996), Obstfeld and Rogoff (1997, Chs 8,9); Agénor and Montiel (1999, Ch.7); Montiel (1999), Sachs and Larrain (1999), and Hausmann (1999). A central issue in the recent debate is whether there can be a middle way to managing exchange rates (Williamson 2000), or whether the practical choice is bipolar, namely, fixed or floating (Fischer 2001).

¹⁵ Whether this remains much of a concern among policy makers given the spectacular devaluations that have occurred in many countries over the last two decades is unclear. The study by Cooper (1971) showing that the length of tenure of both governments and ministers of finance were sharply truncated following currency devaluation needs to be updated. Recent history suggests that devaluation has become increasingly benign as a factor in the demise of governments and finance ministers.

¹⁶ Countries attempting to maintain higher inflation than their trading partners would lose gold, and vice-versa.

¹⁷ In this respect, there is a fundamental confusion over what gives money its value. Money and money-like artifacts have value because they are used as assets or accepted in exchange. Whether a currency is backed by a specific asset such as gold or foreign exchange is much less relevant (Duesenberry 1964). A clear example is given by comparing any national money that is currently subject to a currency board arrangement versus the United States dollar. A currency board provides full backing to the currency with some acceptable asset. At present the United States dollar is not backed by gold or an equivalent asset. (The Federal Reserve holds United States Government securities equivalent to the currency outstanding. This, however, is only using one government promise to support another.) Ultimately, the currency board (as in Argentina) will use U.S. dollars to back its own currency. Thus, the value of the U.S. dollar derives not from the way it is 'backed' (since it has none). Its value derives from its acceptability both in the United States and abroad. The reason that it remains acceptable is that asset-holders expect the United States Government to continue prudently managing the U.S. economy.

¹⁸ The spectacular and costly failures of the U.K and Italy in 1992 to defend their fixed peg within the European Monetary System are examples. The financial meltdown in Sweden at the same time, despite having pushed overnight interest rates to above 500 percent is another.

¹⁹ BCEAO: Central Bank for the West African States: BEAC: Central Bank for Central African States.

²⁰ The models presented in Johnson (1973: Ch. 6), Hallwood and MacDonald (1986), and Corden (1994, Ch.4)

demonstrate these interactions.

²¹ A cheap, common means of evading the controls was for traders to carry a suitcase of CFA bank notes with them on their regular shopping trips to Europe. Banjul in The Gambia was an important starting point. The bank notes could be converted for French francs in London or Geneva.

²² Too little has been made of the fact that for decades bureaucrats have been taking decisions, often on the most arbitrary grounds, about whether a business person or citizen can have access to foreign exchange to fulfill some transaction abroad. The degree to which this system distorted investment decisions and lowered consumer welfare and the costs was typically given far too little weight in arguments for removing controls. This point was obvious to McPherson, who was directly involved in both The Gambia (1985) and Zambia (1992-93) in helping making the case for removing exchange controls. Although they removed exchange controls in 1994, the Zambian authorities have been selectively manipulating the exchange rate since mid-1995. The costs of these interventions have been high. In particular, Zambia has remained uncompetitive internationally and per capita real income have continued to decline (Hill and McPherson 1998, 1999; Chapter 14 in this volume).

²³ The failure to consider risk adjusted returns has led Madavo and Sarbib (1997) and Collier and Gunning (1999) to interpret the high return on investment in Africa as an inducement to foreign investors. When appropriately adjusted for risk, the apparent differential in favor of Africa disappears.

²⁴ This argument has widespread support (World Bank 1999). We believe it is basically wrong, especially in countries with weak, corrupt administrations common to Africa (Harsh 1993; IRIS 1996; Ayittey 1998). It helps explains why foreign and local investors generally continue to avoid most African countries (Cockcroft 1992; Bhattycharya, Montiel and Sharma 1997; Harris 1999). A study by Bhinda *et al.* (1999) showed a surge in foreign investment in Africa during the 1990s, albeit from a small base.

²⁵ Some of this represents an inflow of new capital. Some of it, however, is the reversal of currency substitution as local asset-holders convert their foreign exchange holdings for local currency. Whatever the source, both reflect an increase in confidence.

²⁶ In Mauritius which, has been one of the best managed African countries over the last two decades, the average real interest rate on bank loans over the period 1985 to 1996 was 9.9 percent. The corresponding datum for the United States was 5.1 percent (*IFS* CD-ROM 1998; see also *World Development Indicators* CD-ROM 1998). More recent data show that the differential has persisted.

²⁷ Econometric analysis shows that one of the key factors destabilizing the exchange rate in Africa has been fiscal policy, particularly the size of the fiscal deficit (Ghura and Hadjimichael 1996; Asea and Reinhart 1996; Calamitsis, Basu and Ghura 1999).

²⁸ The record for intervention in developed countries is mixed at best. Studies show that few sterilization does not usually work (Obstfeld and Rogoff 1997, pp.593ff; Humpage and Osterberg 2000)

²⁹ The exception is Botswana, which in mid-1999 had reserves equivalent three years' import coverage. This amount, however, was not being held for exchange management purposes. It was part of the government's overall prudent macroeconomic management of the economy.

³⁰ We are grateful for assistance from Sara Piccicuto in helping arrange the material in this section.

³¹ A country such as Zambia has been typical. Most of its foreign borrowing (in the late 1970s) was used to finance the public deficit (government and SOEs) which had resulted from the government's unwillingness to allow consumption to fall. Many other countries expanded their investment in import-substituting industries. Few of these were competitive with domestic resource costs exceeding unity. That is, when valued at world prices, it was costing the country more than a dollar to generate a dollar of real income (Corden 1966, 1998; Bruno 1972).

³² By the end of 1994, the heavily indebted poor countries (excluding Nigeria) owed 64 percent of their debt to

bilateral creditors, 19 percent to multilateral creditors, 10 percent to private sources, and a further 7 percent as short-term credit (Claessens *et. al.*, 1997p. 235). For some countries, declining real income led to a sharp shift away from private credit. Zambia for example had received 38 percent of its credit from private sources in 1975. By 1995, only 2 percent of its debt was from private sources (Brooks *et. al.*, 1997 p. 138).

³³ "Fifth dimension" financing occurs when selected developed countries repay amounts owed to the World Bank by developing countries. It is one of the many forms of balance of payments support.

³⁴ In practice, both the IMF and World Bank have been in the process of writing down large amounts of their debt. Debt once issued by the IBRD has been refinanced under IDA terms. Similarly the IMF has used Trust Fund reflows to refinance loans formerly taken out as stand-by credit. The now-defunct Rights Accumulation Program was a structured form of debt rescheduling and refinancing. As the first "beneficiary" of a RAP, Zambia was "guided" through four years of loosely applied conditionality (1992 to 1995) only to completely fail the first "test" conditions on a replacement ESAF program in December 1996. Zambia failed to complete that ESAF. A second ESAF, arranged in March 1999, also failed. More recently, Zambia has been catapaulted into a HIPC arrangement (IMF 1999; IMF/IDA 2000).

³⁵ This is emphasized by Squire (1989:1126) who noted that the formal analysis of projects do not typically include the consequences of different financing.

³⁶ Zambia is an example. In 1970, its debt burden was minimal (less than 10 percent of GDP) and its international credit rating was among the highest possible. By 1980, Zambia's debt was \$1.85 billion or equivalent to 58 percent of its GDP. By international standards this was exceedingly high. Debt arrears that had been cumulating since 1975 (reaching \$143 million in 1980) was evidence that the country could not sustain this level of debt (GRZ/UNICEF 1986, pp.36-37).

³⁷ In this context, inefficiency implies that the resources are invested in ways that fail to yield a stream of benefits that will cover the cost of interest and amortization.

³⁸ Arrears imply that the government's creditors are involuntarily providing the necessary finance.

³⁹ Two other issues important to debt management, namely seignorage and the inflation tax, are analyzed in Chapter twelve.

⁴⁰ An interesting example has arisen in Zambia. In 1994, as a temporary expedient preventing the government from falling behind in its foreign debt service, the Bank of Zambia began advancing the government foreign exchange without an equivalent counter-flow flow of kwacha. This quickly proved to be a permanent arrangement. By the early months of 1997, the advance was close to US\$150 million. (By April 1997, it was K184 billion, equivalent to \$143.5 million.) There is nothing in the Bank of Zambia Act that permits such unsecured advances.

⁴¹ Some major (and costly) anomalies can emerge especially when the government has borrowed on behalf of SOEs and on-lent the funds. For example, in1992, the Zambia Electricity Supply Company owed the government on the order of K33 billion derived from dollar-based lending that had been extended. The dollar equivalent of this debt exceeded \$400 million. By the time ZESCO came to discharge some of these debts the kwacha had depreciated to such an extent that the debt was equivalent to \$20 million.

⁴² McAuliffe and McPherson (1995) describe the problems created by interlocking arrears and how they were addressed in The Gambia.

⁴³ Some groups have argued that adopt a 'debt exit strategy' (HIID 1997). Others (e.g. CID 1999) have argued that the debt to African countries should be written off and that aid should be continued at current levels. McPherson (Chapter 9 in this volume) has argued that in order to regenerate and sustain long term growth and development African countries should formulate and implement an aid exit strategy. Properly conceived, this would be a debt exit strategy as well.

Large debt burdens also create the expectation that taxes will have to rise to service them, which deters investment flows and encourages capital flight.

Under Ricardian equivalence, the expected future tax burden would have been discounted at the time the debt was incurred.

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⁴⁴ Insolvency is the inability to pay one's debt. Illiquidity, however, refers to a lack of appropriate assets to discharge one's liabilities. For countries with international debt, problems arise when there are insufficient foreign reserves to service the debt.

⁴⁵ A similar problem arises in monetary management. As real income declines, the real money supply should contract (unless there is compelling reason for the velocity of money to fall). But, as real income declines, government revenue falls as well. This typically leads to an increase in deficit financing and an *increase* in the supply of money. That action exacerbates inflation.

⁴⁶ From a macroeconomic perspective, Ricardian equivalence turns one of Keynes' basic observations about the nature of a monetary economy on its head. Keynes, we recall, stated that a "... monetary economy, ..., is essentially one in which changing views about the future are capable of influencing the quantity of employment and not merely its direction" (Keynes 1936, vii). Under Ricardian equivalence, changing behavior in the present (i.e., additional borrowing by the government) is postulated to have no impact on expectations of future government behavior (since taxpayers are presumed to be neutral with respect to the extra taxes they will pay to service the additional debt). This could only hold if the borrowing has no monetary consequences. It clearly cannot be the case in most African countries which are so over-burdened with debt that the prospects of financing their future operations is problematic. That is, neither the government nor taxpayers can be indifferent to the way future operations are financed.

⁴⁷ The popular press does not accept that Ricardian equivalence holds. There are numerous examples of arguments that additional future taxes deter foreign investment. For example, the *The Financial Times* 8th September 1998, p.18 noted:

⁴⁸ Many organizations and individuals have urged the donor community to "write-off" Africa's debt. Such a prospect is not likely in the near future for many reasons. Most of Africa's debt is held by multilateral institutions that even with the enhanced HIPC initiative have only been moving slowly to the idea of debt rescheduling let alone debt write-offs. A second reason is that the rich countries (mainly G8 and even G16) will not provide the resources required for a debt write-off. The third, but perhaps most important reason, is that few of the donors believe that African governments will avoid the temptation to resume large scale borrowing once their present debt constraints are removed. Fundamentally the issue hinges on the widespread judgement that highly indebted African countries are not yet managed in ways that will help keep their national debt within prudent bounds.

⁴⁹ Although conditionality has been widely used, it is seen by many as being ineffective (Sachs 1989; Dell 1984; Killick 1993, pp.312ff). As this was being revised the World Bank released its study *Aid in Africa:Lessons from Ten Case Studies* which reinforces the position that conditions have generally failed. The World Bank's director of research indicated that in future the Bank would be more circumspect about the types and number of conditions it requires.

⁵⁰ This idea is not new. McPherson (1979) recommended it as one way of overcoming the institutionally determined distortions which generate the recurrent cost problem in Africa. The essence of that problem is that donors provide capital resources at or near zero opportunity cost, expecting the local authorities to raise the recurrent counterpart resources. These resources are costly in terms of local influence (no one likes to pay additional taxes) and they divert resources from other (priority) expenditures. The rational "solution" for African governments has been to accept the capital from the donors, let it wear out and then petition for it to be replaced. To overcome this practice, McPherson suggested that the government should set up a mechanism (not unlike a currency board applied to investment) that would pass on donor grants to local agencies at an opportunity cost that provided the appropriate incentives to use capital efficiently.

⁵¹ Hanke and Schuler 1994; Walters 1998; Hanke 1999

⁵² This has been the situation in Argentina since Brazil devalued the *real* in 1998. As a member of MERCOSUR Argentina has experienced a major shift in its terms of trade with its largest trading partner. The currency board (and the history of inflation) lock Argentina into a fixed rate.

⁵³ This is adapted from Duesenberry (1992, Ch.12). Other contributions may be found in Agénor and Montiel (1999, pp.503-505).

⁵⁴ Meier 1970, p.186

⁵⁵ An example of these pressures is evident in the report of the Governor of the Reserve Bank of South Africa to the Bank's Annual General Meeting in August 1998 (Stals 1998).

^{56.} The literature on confidence is largely confined to the developed countries. Most attention has been devoted to the credibility of monetary policy and the reputation of the monetary authorities (Backus and Driffill 1985; Barro 1986). Despite the simplicity of the behavior being modelled (typically a single decentralized decision maker whose well-defined utility function depends on two variables), the literature has become highly technical. The main issue, however, is the perceived consistency of the whole policy package which the monetary authorities are attempting to implement (Blackburn and Christensen 1989; Goodhart 1989, pp.361-369; Crockett 1997; Bernanke and Mishkin 1999). The analysis focuses entirely on the credibility of the central bank's policy. The technical capacity of the central bank to implement its policy is never questioned. By contrast, the major concern in developing countries is the competence and capacity of the central bank itself. A major problem in the latter areas is that the globalization of financial markets grossly overtaxes the capacities of African central banks to cope, particularly those that seek administrative solutions to the allocation of finance rather than market-based solutions (Summers 1995; Friedman 2000, Jordan 2000).

⁵⁷. This is more apparent now that many financial claims are little more than electrical impulses in a computer memory.

^{58.} The former Chairman of the New York Fed made the point when he noted "...at the end of the day, commercial banks and central banks have only one asset that really matters, and that asset is public confidence" Corrigan (1990:1).

⁵⁹. The Gambia's formal adoption of an indirect monetary management system in September 1990, was accompanied by the warning from central bank officials to the commercial banks that imprudent behavior would lead to the re-imposition of credit ceilings. In effect, the central bank did not lift credit ceilings.

⁶⁰ As Asian countries discovered during the financial crisis that began in mid-1997, this is easier said than done. A major problem was keeping track of the full extent of the capital flows.

⁶¹ There has been a voluminous literature on analyzing the Asian crisis and its aftermath. Many perspectives have been represented. Some analysts highlight the problems of fundamentals (especially the fragile financial systems). Some focus on policy mistakes such as implicitly guaranteeing a fixed exchange rate. Others emphasize the nature of self-fulfilling creditor panics. Finally, some stress the disruptive effects of exogenous factors such as terms of trade shocks. Relevant sources include Radelet and Sachs (1998a,b), Sachs (1998), Fischer (1998), Moreno (1998), Obstfeld (1998), Dean (1998), Perkins (1998), Goldstein (1998), Krugman (1998, 1999), Harris (1999), Aghevli (1999), Pink 1999), Chang (1999), Harris (1999a), and Lane *et al.* (1999).

⁶² Much has been written about how the commercial banks in Thailand, Indonesia and Korea had lent extensively in foreign exchange to local operators whose operations were entirely in local currency. When exchange rates moved, by as much as 80 percent in Indonesia over a six-month period, the local debtors could not meet their debt service payments (Radelet and Sachs 1998; Hausmann 1999).

⁶³ This is adapted from Gray and Duesenberry (1996). Other relevant sources include Clement (1995) and Dibley (1996).

 $^{^{64}}$ The parity of FCFA 50 = FF 1 was set in 1948.

⁶⁵ Equatorial Guinea a former Spanish colony and with a population of around half a million.

⁶⁶ The closest France came to explicit acknowledgement of its veto power and intent to use it was the warning delivered to the FZ authorities in Prime Minister Balladur's September 1993 letter. The letter stated that French non-project aid to a member country would be conditional on its concluding an agreement with the IMF. This eventually meant accepting devaluation.

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